Subject Index—Volumes 274–285

A

Absorbable devices
  fracture fixation screws, **285**:263
  tissue response to implants, **278**:193
Acetabulum
  CT evaluation of anatomy, **277**:175
  fetal histomorphometry of, **281**:48
  fixation in arthroplasty of hip, **274**:172. *See also* Hip, arthroplasty of
  fracture in pregnancy, **282**:229
Achilles tendon
  rupture of
    affecting ankle plantar flexors, **279**:237
    repair with flap augmentation technique, **280**:241
  in rheumatoid arthritis, **280**:235
  tendinitis in runners, **282**:208
Acromioplasty, anterior, assessment of results in, **278**:14
Acrylic fragmentation in hip arthroplasty, **285**:116
Adipose tissue, and epidural compression in spinal canal, **275**:140
Adolescents
  gonococcal flexor tenosynovitis in, **281**:212
  idiopathic scoliosis in, collagen genes in, **274**:305
  meniscectomy in, **279**:180
  results of total arthroplasty in, **283**:156
  transepiphyseal hip fracture-dislocation in, **284**:170
Aging
  and bone changes of mucolipidosis II, **276**:283
  femoral neck fractures in, **282**:123
  femur shape and strength in, **274**:194
  hip arthroplasty in, **274**:30, **281**:101
  and interdisciplinary hip fracture care, **274**:213
Airport metal detectors, sensitivity of implants to, **280**:261
Amputations
  above-knee, lower limb proprioception in, **284**:239
  preoperative assessment in, **281**:239
Amyloidosis, and pathologic fracture in dialysis patient, **274**:300
Anatomy
  of acetabulum, CT evaluation of, **277**:175
  of coracohumeral ligament, **280**:182
  of distal radioulnar joint, **275**:14, 37
  of scapula, radiographic, **277**:142
  of vertebral pedicles, **284**:34
Aneurysmal bone cyst, in upper thoracic spine, **279**:127
Angioplasty, percutaneous transluminal, of hypogastric artery in buttock claudication, **284**:176
Ankle
  anterior dislocation with trigonal process fracture, **278**:171
  arthrodesis of, Ilizarov frame in, **280**:160
  closed reduction of juvenile Tillaux fracture, **276**:262
  fractures produced in autopsy specimens, **285**:244
  lateral instability of, **276**:253
  plantar flexors after Achilles tendon rupture, **279**:237
Anorexia nervosa, metacarpal bone morphometry in, **278**:217
Antibiotics
  local, for infected arthroplasties, **281**:216
  in plaster of paris beads, **282**:241
  in PMMA beads
    diffusion of, **278**:244
    elution characteristics of, **284**:303
Antiinflammatory drugs, nonsteroidal
  piroxicam affecting chondrocyte metabolism, **277**:298

Subject Index—Volumes 274–285

A

Absorbable devices
  fracture fixation screws, **285**:263
  tissue response to implants, **278**:193
Acetabulum
  CT evaluation of anatomy, **277**:175
  fetal histomorphometry of, **281**:48
  fixation in arthroplasty of hip, **274**:172. *See also* Hip, arthroplasty of
  fracture in pregnancy, **282**:229
Achilles tendon
  rupture of
    affecting ankle plantar flexors, **279**:237
    repair with flap augmentation technique, **280**:241
  in rheumatoid arthritis, **280**:235
  tendinitis in runners, **282**:208
Acromioplasty, anterior, assessment of results in, **278**:14
Acrylic fragmentation in hip arthroplasty, **285**:116
Adipose tissue, and epidural compression in spinal canal, **275**:140
Adolescents
  gonococcal flexor tenosynovitis in, **281**:212
  idiopathic scoliosis in, collagen genes in, **274**:305
  meniscectomy in, **279**:180
  results of total arthroplasty in, **283**:156
  transepiphyseal hip fracture-dislocation in, **284**:170
Aging
  and bone changes of mucolipidosis II, **276**:283
  femoral neck fractures in, **282**:123
  femur shape and strength in, **274**:194
  hip arthroplasty in, **274**:30, **281**:101
  and interdisciplinary hip fracture care, **274**:213
Airport metal detectors, sensitivity of implants to, **280**:261
Amputations
  above-knee, lower limb proprioception in, **284**:239
  preoperative assessment in, **281**:239
Amyloidosis, and pathologic fracture in dialysis patient, **274**:300
Anatomy
  of acetabulum, CT evaluation of, **277**:175
  of coracohumeral ligament, **280**:182
  of distal radioulnar joint, **275**:14, 37
  of scapula, radiographic, **277**:142
  of vertebral pedicles, **284**:34
Aneurysmal bone cyst, in upper thoracic spine, **279**:127
Angioplasty, percutaneous transluminal, of hypogastric artery in buttock claudication, **284**:176
Ankle
  anterior dislocation with trigonal process fracture, **278**:171
  arthrodesis of, Ilizarov frame in, **280**:160
  closed reduction of juvenile Tillaux fracture, **276**:262
  fractures produced in autopsy specimens, **285**:244
  lateral instability of, **276**:253
  plantar flexors after Achilles tendon rupture, **279**:237
Anorexia nervosa, metacarpal bone morphometry in, **278**:217
Antibiotics
  local, for infected arthroplasties, **281**:216
  in plaster of paris beads, **282**:241
  in PMMA beads
    diffusion of, **278**:244
    elution characteristics of, **284**:303
Antiinflammatory drugs, nonsteroidal
  piroxicam affecting chondrocyte metabolism, **277**:298

preventing heterotopic bone after hip arthroplasty, **279**:157
Arteriovenous malformation, intraosseous, in childhood, **276**:307
Arthritis
rheumatoid. *See* Rheumatoid arthritis
septic
arthroscopic management of, **275**:243
of hip joint in childhood, **281**:123
total hip arthroplasty in, **276**:210
Arthrodesis
of ankle, Ilizarov frame in, **280**:160
of elbow, and compensatory motion in upper extremity, **281**:89
occipitocervical, onlay technique in, **280**:170
spinal
anterior lumbar, **284**:47
cervical, **284**:10
lumbar, indications for, **279**:87
pedicle screw fixation in, **284**:109
pseudarthrosis after, **284**:3, 80
in scoliosis, **284**:24
Arthrography
in congenital dislocation of hip, **281**:25
of distal radioulnar joint, **275**:76
Arthroplasty
alumina ceramics in, **282**:4. *See also* Ceramic prostheses
of distal radioulnar joint, **275**:104
of hip. *See* Hip, arthroplasty of
of knee. *See* Knee, arthroplasty of
PGE_2 production in, **284**:283
of shoulder, Kessel prosthesis in, **277**:155
ultrasonic technology in revision surgery, **285**:147
Arthroscopy
of distal radioulnar joint, **275**:77
in pyarthrosis management, **275**:243
and synovectomy in hemophilic arthropathy of knee, **283**:196
Attenborough prosthesis in knee arthroplasty, **281**:177
Autopsy specimens
ankle fractures produced in, **285**:244
knee testing in, **282**:196

B

Back pain
definition of segmental instability in, **279**:60
disability prediction in, **279**:101
in diskitis from *Eikenella corrodens*, **280**:175
in facet syndrome, **279**:110
indications for lumbar spine fusion in, **279**:87
and industrial back injury reporting, **279**:21
and MRI studies of degenerative disk disease, **279**:68
natural course of lumbar spinal stenosis, **279**:82
nerve root compression in, **279**:35
newest knowledge of, **279**:8
pathogenesis of nerve root damage in, **279**:40
and radiography to predict injury claims, **283**:124
studies on lumbar disc degeneration, **279**:3
vibration-related, **279**:49
Bacteria, adherence to PMMA beads, **278**:260
Biceps brachii
accessory head of, **280**:179
failure of Hitchcock procedure for lesions in long head, **275**:161
rupture through short head, **277**:139
Biglycan in bone, **281**:282
Biodegradable fixation of humeral physeal fractures, **283**:237
Biomechanical studies
of distal radioulnar joint, **275**:46
of holding power in reinforced cancellous screws, **284**:260
of Ilizarov fixator, **280**:11
in fracture fixation, **280**:15
of intramedullary nails in femoral shaft fractures, **276**:277
of Kirschner-wire fixation effects, **283**:292
of load-bearing function of fibula, **279**:223
of rotator cuff tears, **284**:144
of spinal model for testing fixation devices, **284**:267
of unidirectional and birectional Kirschner-wire insertion, **284**:299
Bisphosphonates, and bone modeling in rat tibia, **278**:253
Blood salvage in spine surgery, perioperative, **278**:51
Bone
aneurysmal cyst in upper thoracic spine, **279**:127
bonding to ceramics affected by demineralized bone powder, **278**:226
calvarial regeneration in primates, **282**:293
cellular responses to coupled electrical field, **285**:255
changes in mucolipidosis II, **276**:283
density studies in femur, **283**:244
fibrin sealant mixed with, in spinal surgery, **275**:133

healing of, factors affecting, **277**:297
heterotopic
in cemented and noncemented hip arthroplasties, **282**:145
experimental production of, **283**:4
prophylaxis after hip arthroplasty, **279**:157, **280**:230
induction of
cyclosporin A affecting, **284**:288
matrix vesicles in, **277**:266
ingrowth at defect sites in hip arthroplasty, **274**:47
intercalary transport in Ilizarov method, **280**:136, 143, 153
mastocytosis of, **279**:281
metacarpal morphometry in anorexia nervosa, **278**:217
mineral-matrix interactions in, **281**:244
modeling in rat tibia, bisphonates and loading affecting, **278**:253
morphogenetic protein
effects on nonunion cells, **278**:286
implants in nonunions and segmental bone defects, **277**:229
PLA homopolymers as carriers for, **278**:274
necrosis of. *See* Osteonecrosis
noncollagenous matrix proteins of, **281**:275
physeal distraction for angular deformities, **283**:98
remodeling in hip arthroplasty, **276**:83
resorption around implants
mediators of, **281**:295
with stress shielding, **274**:79, 124
resorptive factors in joint fluid, **284**:273
response around noncemented knee implants, **283**:106
strength after distraction osteogenesis, **275**:248
Bone grafts
in anterior spine surgery, **284**:54
cortical
experimental study of, **282**:273
strut allografts in revision hip arthroplasty, **285**:35
fibular, free vascularized, in osteonecrosis, **277**:128
and healing of fractures, **277**:306
incorporation around implants, **274**:282
osteonecrosis in, **277**:9
Bone-implant interface, ultrastructure of, **276**:147
Braces compared to locked nailing, in tibial shaft fractures, **277**:243
Bunionette, lateral condylar resection for, **278**:183
Burn contractures, Ilizarov fixator in, **280**:117
Bursitis, iliopsoas, after hip arthroplasty, **279**:144
Buttock claudication, hip pain in, **284**:176

C

Calcium levels, trauma affecting, **275**:306
Calcium phosphate coatings, on hip arthroplasty components, **280**:300
Calcium pyrophosphate dihydrate crystal deposition disease, in Coffin-Lowry syndrome, **275**:144
Calvarium regeneration in primates, **282**:293
Capitate bone, giant-cell tumor of, **279**:264
Capsulitis, adhesive, of shoulder, **282**:105
Carotid artery aneurysm, after torticollis correction, **275**:258
Carpal tunnel syndrome, carpal canal stenosis in, **285**:210
Cartilage
articular, cryopreservation of, **283**:11
graft repair of defects in, **275**:263
immunohistochemistry of canals in, **279**:292
mineral-matrix interactions in, **281**:244
radiotolerance of, **275**:300
regeneration after tibial osteotomy, **277**:210
triangular fibrocartilage complex disruption at wrist, **275**:65
Casts, spica, hinged shoulder, **278**:9
Cement
centrifuged, performance in simulated model, **285**:91
compared to cementless fixation in hip arthroplasty, **276**:19
interface with metal in hip arthroplasty, **285**:67
low viscosity, **276**:4
segmental extraction in hip arthroplasty revisions, **285**:158
vacuum mixing and centrifugation in hip arthroplasty, **285**:84
Ceramic prostheses, **276**:135, **282**:4
alumina-alumina couplings in, **282**:31
alumina-polyethylene versus metal-polyethylene, **282**:86
bioactive agents as coatings, **276**:102
biocompatibility of alumina in, **282**:10
bonding of bone to, demineralized bone powder affecting, **278**:226
ceramic-to-ceramic bearings in, **282**:19
compared to metal implants, **282**:81

compared to polyethylene in knee arthroplasty, **282**:95
long-term effects of, **282**:47
sixteen years of experience with, **282**:64
ten- to 14-year results with, **282**:73
ten-year survivorship with, **282**:53
Cerebral palsy, hip flexion contracture in, **281**:97
Cervical spine
anterior disk removal and fusion, **284**:10
occipitocervical fusion with onlay technique, **280**:170
occipitocervical instability, **283**:63
Charnley low-friction hip arthroplasty, in young patient, **285**:45
Chemonucleolysis
complications of, **284**:63
failures in, **283**:74
Children. *See* Pediatric conditions
Chondrocyte metabolism affected by piroxicam, **277**:298
Chondromalacia patellae, McKeever patellar resurfacing prosthesis in, **279**:201
Chondromatosis, synovial, ultrastructural morphology of, **276**:299
Claudication, buttock, hip pain in, **284**:176
Clavicle, posterior physeal separation of, **281**:84
Clayton total hip arthroplasty, **281**:133
Clubfoot deformity, revision surgery in, **283**:223
Coagulation, intravascular, and osteonecrosis, **277**:41
Cobalt-alloy metal debris, in hip revision arthroplasties, **276**:75
Cobalt-chrome cable debris in hip arthroplasty, acetabular loosening from, **285**:140
Coffin-Lowry syndrome, **275**:144
Collagen
genes in scoliosis, **274**:305
structure and distribution of, **282**:250
Colles' fracture, deformity after, partial ostectomy of ulna in, **275**:3
Compartment syndrome
gluteal
relation to crush syndromes, **277**:161
from spontaneous gluteal artery rupture, **275**:253
peroneal, forced march-induced, **284**:189
Computed tomography
of acetabular anatomy, **277**:175
in acetabular cup measurement in THA, **276**:206
in congenital dislocation of hip, **281**:25
of femoral malrotation, **279**:258
of hip, compared to MR imaging, **274**:135
in planning hip osteotomy, **274**:154
of titanium hip implants, **275**:194
Computer-aided design and manufacturing system for hip arthroplasty, **285**:48
Condylocephalic nailing in hip fractures, **283**:90
Contractures
burn, Ilizarov fixator in, **280**:117
of coracohumeral ligament, **280**:182
flexion
of hip, in cerebral palsy, **281**:97
in knee arthroplasty, **284**:221
Coracohumeral ligament, contracture of, **280**:182
Corticosteroids, and osteonecrosis
in lupus erythematosus, **277**:89
multifocal, **279**:176
in rabbits, **277**:61
Corticotomy, in Ilizarov method, **280**:37
Coxarthrosis
and femoral neck fractures, **278**:88
pathogenesis of, **284**:273
C-reactive protein levels, after orthopedic surgery, **275**:237
Cruciate ligament
anterior
acute partial tears of, **281**:152
in knee arthroplasty, **276**:245
patellar donor site healing after reconstruction of, **278**:160
preload and isometric position of graft or prosthesis, **279**:214
reconstruction stability with continuous passive motion, **277**:201
semitendinosus LAD-ACL reconstruction, **283**:21
tibial tunnel placement affecting graft impingement, **283**:187
treatment of motion problems after reconstruction, **277**:217
valgus osteotomy with reconstruction of, **278**:153
insufficiency of, fibular head sign in, **275**:220
new canine ligament formation with distraction histogenesis, **280**:30
posterior
chronic deficiency of, tibial subluxation in, **284**:193
retention in condylar knee arthroplasty, **281**:168
spared in complete knee dislocation, **284**:228

Crush syndromes, relation to gluteal compartment syndrome, **277**:161
Cryopreservation of articular cartilage, **283**:11
Cubital tunnel, ulnar nerve decompression in, **274**:231
Cyclosporin A, and bone induction, **284**:288
Cyst of bone, aneurysmal, in upper thoracic spine, **279**:127

D

Darrach procedure, in distal ulnar pathology, **275**:3, 85
Death risk factors, in hip fractures, **280**:214
Decorin in bone, **281**:282
Dialysis, and pathologic fractures, **274**:300
Disability prediction in back pain, **279**:101
  radiography in, **283**:124
Disk herniations from lumbar compression instrumentation, **284**:91
Diskectomy, percutaneous, **284**:75
Diskitis from *Eikenella corrodens*, **280**:175
Dislocation
  of ankle, anterior, with trigonal process fracture, **278**:171
  of distal radioulnar joint, complex, **275**:90
  of elbow
    anatomic factors in, **274**:226
    mechanisms in, **280**:186
  of hip
    congenital. *See* Hip, congenital dislocation or dysplasia
    traumatic, in child, **280**:208
  of hip arthroplasty, bipolar prosthesis in, **278**:121
  of knee
    irreducible, **277**:197
    traumatic, **284**:203
    without PCL disruption, **284**:228
  of knee arthroplasty, **278**:128
  of metatarsophalangeal joints, painful, **278**:164
  patellar
    locked, with vertical axis rotation, **279**:190
    recurrent, and patella alta, **274**:265
Distraction histogenesis with external fixation. *See* Ilizarov fixator
Down's syndrome, hip joint in, **278**:101
Dynamic axial external fixation, in nonunions, **278**:200
Dysplasia
  femoral trochlear, **281**:159
  of hip. *See* Hip, congenital dislocation or dysplasia
  osteofibrous, of long bones, **278**:235

E

Ehlers-Danlos syndrome, spontaneous gluteal artery rupture in, **275**:253
Eicosanoids, and inflammation in avascular necrosis, **281**:305
Eikenella corrodens, diskitis from, **280**:175
Elbow
  arthrodesis of, and compensatory motion in upper extremity, **281**:89
  chronic medial instability, **278**:62
  dislocation of, anatomic factors in, **274**:226
  instability spectrum, **280**:186
  internal fixation of radial neck fracture, **276**:187
  irreducible "pulled elbow" in child, **284**:153
  olecranon stress fractures in throwers, **278**:58
  osteochondritis dissecans of, **284**:156
  persistent epicondylitis, **278**:73
  tennis elbow relief with stroke modification, **276**:182
  ulnar nerve decompression at cubital tunnel, **274**:231
Elderly persons. *See* Aging
Electrical field, coupled, bone cell response to, **285**:255
Electrical stimulation
  and anterior tibial compartment pressure, **284**:181
  in idiopathic scoliosis, **276**:176
Electromyography of shoulder, **284**:116
Embolism
  and osteonecrosis, **277**:10
  pulmonary
    after hip arthroplasty, **276**:222
    in hip and knee arthroplasties, **282**:158
Epicondylitis of elbow, persistent, **278**:73
Epidural compression in spinal canal, from adipose tissue, **275**:140
Estrogen receptors, in fracture healing, **280**:277
Evoked potentials, somatosensory, in limb lengthening, **285**:273
Ewing's sarcoma, second cancers in, **274**:275
Exercise, and forced march-induced peroneal compartment syndrome, **284**:189
External fixation
  dynamic, in nonunion, **278**:200
  pin design in, **278**:305

of unstable distal radial fractures, hand and wrist function after, **285**:200

F

Facet syndrome, and low back pain, **279**:110
Fat
deposition of, and epidural compression in spinal canal, **275**:140
interposition for central-physeal defects, **282**:304
Femur
aging affecting, **274**:194
density of, and mechanical properties, **283**:244
fractures of
fluted rod in treatment of, **285**:223
Grosse-Kempf locking nails in, **283**:86
subtrochanteric, **283**:231
trochanteric, **277**:182
fractures of neck
and coxarthrosis, **278**:88
in elderly persons, **282**:123
fractures of shaft, intramedullary nails in, **276**:277
growth-plate activity in, **275**:274
malrotation assessment with CT, **279**:258
multiapical deformities of, **280**:65
osteonecrosis of. *See* Osteonecrosis
slipped capital epiphysis, internal fixation in, **281**:115
small cell osteosarcoma of, intracortical, **279**:269
trochlear dysplasia, **281**:159
uniapical angular deformities of, **280**:48
Fibrinolysis in back pain, **279**:44
Fibroblasts, synovial fluid affecting, **274**:294
Fibroma, ossifying, of long bones, **278**:235
Fibula
free vascularized graft in osteonecrosis, **277**:128
head sign in anterior cruciate ligament insufficiency, **275**:220
load-bearing function of, **279**:223
stress fracture of, synostosis-induced, **281**:195
Fistula, enterocutaneous, in hip arthroplasty, **278**:108
Fixation of fractures. *See* External fixation; Internal fixation
Flap repair, in Achilles tendon rupture, **280**:241
Flatfoot, surgical treatment in childhood, **283**:34
Flexion contractures
of hip, in cerebral palsy, **281**:97
in knee arthroplasty, **284**:221
Flexor tendon repair, suture placement in, **280**:198
Flexor tenosynovitis, gonococcal, in adolescent male, **281**:212
Fluoroscopy of rotator cuff tears, **284**:144
Foot
ankle plantar flexors after Achilles tendon rupture, **279**:237
deformities after stroke, **282**:213
flexible flatfoot in children, **278**:177
Hawkins type III fracture-dislocation, **279**:254
Ilizarov ankle arthrodesis, **280**:160
Ilizarov technique in complex deformities, **280**:94
lateral condylar resection for bunionette, **278**:183
painful subluxation or dislocation of metatarsophalangeal joints, **278**:164
prevention of overuse injuries, **281**:189
revision surgery in clubfeet, **283**:223
surgery for chronic heel pain, **279**:229
surgery of flatfoot in childhood, **283**:34
Forearm, relation to distal radioulnar joint, **275**:56
Foreign bodies
and osteitis of metacarpal bone, **278**:69
and osteomyelitis induction, **280**:289
Fracture. *See also specific anatomic sites of fractures*
absorbable fixation screws in, **285**:263
biomechanics of Ilizarov fixator in, **280**:15
burst, acute, **276**:169
estrogen receptors in healing of, **280**:277
newest factors in healing of, **277**:297
osteonecrosis in, **277**:7
pathologic, in hemodialysis patient, **274**:300
stress
fibular, synostosis-induced, **281**:195
of hip, after knee surgery, **281**:140
of olecranon, in throwers, **278**:58
Fracture-dislocation
Hawkins type III, **279**:254
of hip, transepiphyseal, **284**:170
Fracture table traction, pudendal nerve palsy after, **276**:272
Fusion procedures. *See* Arthrodesis

G

Gallannaugh prosthesis in knee arthroplasty, **281**:177

Genes, collagen, in scoliosis, **274**:305
Giant-cell tumors
  of capitate, **279**:264
  of hand, benign metastasizing, **274**:270
  of spine, **278**:29
Glenohumeral joint, articular geometry of, **285**:181
Gluteal compartment syndrome
  relation to crush syndromes, **277**:161
  in spontaneous gluteal artery rupture, **275**:253
Gluteus maximus muscle, spindle cell hemangioendothelioma in, **281**:224
Glycoprotein-75, acidic, in bone, **281**:281
Gonococcal flexor tenosynovitis, in adolescent male, **281**:212
Gout, hemarthrosis in, **277**:262
Grosse-Kempf locking nails
  in femoral and tibial fractures, **283**:86
  in subtrochanteric fractures of femur, **283**:231
Growth factors, and healing of fractures, **277**:308
Growth-plate activity in lower extremity, **275**:274

H

Hamartomata, deep vascular, atypical, **280**:247
Hand
  complications of pin fixation in, **276**:194
  congenital trigger digit, **285**:205
  embedded ring injuries, **276**:192
  foreign-body osteitis of metacarpal bone, **278**:69
  function after external fixation of unstable distal radial fractures, **285**:200
  giant-cell tumors of, benign metastasizing, **274**:270
  gonococcal flexor tenosynovitis in adolescent male, **281**:212
  suture placement in flexor tendon repair, **280**:198
Hawkins type III fracture-dislocation, **279**:254
Healing
  of fractures
    estrogen receptors in, **280**:277
    newest factors in, **277**:297
  of patellar tendon donor site, after anterior cruciate ligament reconstruction, **278**:160
Heel, surgery for chronic pain in, **279**:229
Hemangioendothelioma, spindle cell, intragluteal, **281**:224
Hemangioma of long tubular bone, **280**:256
Hemarthrosis in gout, **277**:262
Hemiarthroplasty
  compared to total hip arthroplasty in femoral neck fractures, **282**:123
  in trochanteric fracture of femur, **277**:182
Hemodialysis, and pathologic fractures, **274**:300
Hemophilia
  hip arthroplasty in, **276**:210
  knee arthropathy in, synovectomy in, **283**:196
  pseudotumor of ilium in, **284**:234
Heparin
  intraoperative, in hip arthroplasty
    adjusted dose in, **277**:188
    intravenous doses in, **274**:35
  low-molecular-weight, in hip fracture surgery, **278**:95
Hip
  arthroplasty of
    acetabular fixation in, **274**:172
    acetabular loosening from cobalt-chrome cable debris, **285**:140
    acetabular roof reinforcement rings in, **283**:149
    acrylic fragmentation in, **285**:116
    adjusted-dose heparin prophylaxis in, **277**:188
    and age-related changes in femur, **274**:194
    analysis of cementless femoral prostheses, **285**:13
    analysis of retrieved implants, **274**:97
    in avascular necrosis, **281**:145
    and bead loosening in acetabular component, **281**:112
    bipolar prostheses in osteonecrosis, **277**:121
    calcium phosphate-coated components in, **280**:300
    cement-metal interface in, **285**:67
    cement versus cementless fixation in, **276**:19
    centrifuged cement performance in simulated model, **285**:91
    ceramics in. *See* Ceramic prostheses
    Charnley low-friction procedure in young patient, **285**:45
    Clayton femoral component in, **281**:133
    cobalt-alloy metal debris in, **276**:75
    collared and precoated femoral stems in, **285**:73
    compared to hemiarthroplasty in femoral neck fractures, **282**:123
    composite fixation of salvage prostheses, **276**:91

computer-aided design and manufacturing system in, **285**:48
cortical strut allografts in revisions, **285**:35
CT measurement of acetabular cup in, **276**:206
current clinical perspectives in, **276**:33
debris in femoral endosteolysis in loose implant, **276**:157
deep sepsis etiology in, **280**:200
defect filling and bone ingrowth in, **274**:47
digital documentation in, **274**:15, 113
dislocation after, bipolar prostheses in, **278**:121
dissociation of modular components in, **278**:111
early efforts in, **274**:22
in elderly persons, **274**:30, **281**:101
enterocutaneous fistula in, **278**:108
evaluation of titanium noncemented prosthesis, **283**:49
experimental bone remodeling in, **276**:83
failure of modular prostheses in, **285**:129
failure of noncemented porous-coated implants in, **278**:116
fallen wire sign in prosthetic loosening, **284**:161
femoral component after low-friction procedures, **279**:163
first 32 years of, **274**:6
hemiarthroplasty in trochanteric fracture of femur, **277**:182
in hemophilic arthropathy, **276**:210
heterotopic bone in cemented and noncemented procedures, **282**:145
heterotopic bone prophylaxis in, **279**:157, **280**:230
history of femoral head intramedullary stemmed implant in, **281**:107
hydroxylapatite-coated implants in, **285**:102
iliopsoas bursitis after, **279**:144
and imaging of titanium implants, **275**:194
infections treated with local antibiotics, **281**:216
intraoperative IV heparin in, **274**:35
intrapelvic extraction of, **282**:154
late aseptic loosening of cemented prostheses, **275**:174
LD modular system in, **283**:39
and learning curve for PCA arthroplasties, **282**:132
lessons in 30 years of, **274**:12, 22
liner separation from acetabular cup in, **282**:164
loosening and loss of bone stock in, **274**:15
loosening of cemented acetabular components in, **274**:60
low viscosity cement in, **276**:4
material of prosthetic components in, **274**:13
metal levels in well-fixed and loose cemented implants, **276**:66
modular femoral stem removal in, **285**:155
in osteopetrosis, **276**:214
performances of ingrowth surfaces in, **276**:41
porous-coated femoral stem removal in, **285**:164
preoperative planning in, **274**:13
pulmonary embolism in, **276**:222, **282**:158
in renal transplant patients, **284**:164
results in adolescents, **283**:156
revision with MEC-Ring acetabular component, **282**:114
in rheumatoid arthritis, **277**:166
robot development for, **285**:57
roentgen stereophotogrammetric analysis of fixation in, **276**:56
segmental cement extraction in revisions, **285**:158
Spanish experience in, **283**:57
standardized terminology for, **274**:20, 113
stress shielding in. *See* Stress shielding with hip implants
tissue growth into porous acetabular components, **283**:163
torsional fixation of femoral component in, **275**:187
tribological study of retrieved prostheses, **276**:115
ultrasonic technology in revisions, **285**:147
Urist socket in, **285**:4
vacuum mixing and centrifugation of cement in, **285**:84
wear debris-induced osteolysis in, **276**:7
congenital dislocation or dysplasia, **281**:2
conservative treatment of, **281**:41
etiologic factors in, **281**:75
and fetal acetabulum, **281**:48
imaging in, **281**:22
imaging with CT versus MRI, **274**:142
ischemic necrosis in, **281**:11
long-range problems after successful treatment, **281**:69
management after walking age, **281**:34

neonatal screening for, **281**:63
osteochondritis in, **281**:56
Pavlik harness in, **281**:4, 29
signs in diagnosis of, **274**:3
ultrasonography in infants, **274**:160, **279**:138
coxarthrosis
and femoral neck fractures, **278**:88
pathogenesis of, **284**:273
in Down's syndrome, **278**:101
flexion contracture in cerebral palsy, **281**:97
fractures of
condylocephalic nailing in, **283**:90
in geriatric patients, **274**:213
and low-molecular-weight heparin in surgery, **278**:95
mortality in, **280**:214
imaging with CT versus MRI, **274**:135
nonweight bearing affecting cartilage in, **279**:149
osteoporosis of, transient
in children, **275**:199
imaging with CT versus MRI, **274**:142
magnetic resonance imaging in, **280**:223
osteotomy planning with CT reconstruction, **274**:154
pain from buttock claudication, **284**:176
pigmented villonodular synovitis of, **275**:180
septic arthritis in childhood, **281**:123
stress fracture after knee surgery, **281**:140
transepiphyseal fracture-dislocation, **284**:170
traumatic dislocation in child, **280**:208
ultrasonography in infants, **274**:160, **279**:138, **281**:18, 22
Hip Society
founder of, **285**:11
proceedings of 1992, **285**:2
silver anniversary of, **285**:7
Hitchcock procedure, cause for failure in, **275**:161
Humerus
articular geometry of glenohumeral joint, **285**:181
biodegradable fixation of physeal fractures, **283**:237
hemangioma of, **280**:256
supracondylar fractures in children, **278**:81
Hyaluronic acid, affecting ligament fibroblasts, **274**:294
Hydatid disease of pelvic bones, **280**:251
Hydroxyapatite-coated implants
bone graft incorporation around, **274**:282
in hip, **285**:102
Hypogastric artery stenosis, buttock claudication in, **284**:176

I

Iliopsoas bursitis, after hip arthroplasty, **279**:144
Ilium, hemophilic pseudotumor of, **284**:234
Ilizarov fixator, **280**:2, 7
in ankle arthrodesis, **280**:160
biomechanics of, **280**:11
in fracture fixation, **280**:15
in burn contractures, **280**:117
in canine leg lengthening, **278**:265
in cavitary osteomyelitis, **280**:153
in complex foot deformities, **280**:94
in congenital pseudoarthrosis of tibia, **280**:81
corticotomy for, **280**:37
experience in Spain, **283**:116
factors affecting tensioned wires in, **280**:23
and formation of new canine cruciate ligament, **280**:30
in infected nonunions and segmental defects of tibia, **280**:143
and intercalary bone transport, **280**:136, 143, 153
in melorheostosis, **281**:163
and Monorail bone transport system, **282**:233
pediatric applications of, **280**:72
Rancho mounting technique for, **280**:104
in segmental skeletal defects, **280**:136
stability affected by wire configuration, **279**:299
in tibial fractures, **278**:207, **280**:125
Immobilization, affecting immature ligaments, **277**:277
Infection
of arthroplasties, treatment with local antibiotics, **281**:216
arthroscopic management of pyarthrosis, **275**:243
deep sepsis etiology in hip arthroplasty, **280**:200
septic arthritis of hip joint in children, **281**:123
spinal, postoperative, **284**:99
in tibial nonunions, Ilizarov apparatus in, **280**:143
Insall-Salvati ratio, for patellar height, **282**:170
Internal fixation
and healing of fractures, **277**:303
of radial neck fractures, **276**:187
in slipped capital femoral epiphysis, **281**:115

tissue response to absorbable implants in, **278**:193
of ulnar fractures, locking nail in, **283**:81
Isometers, tension, accuracy of, **279**:214

K

Kennedy-LAD, in anterior cruciate ligament reconstruction, **283**:21
Kessel prosthesis in shoulder arthroplasty, **277**:155
Kidney disease
and hip arthroplasty in transplant patients, **284**:164
and pathologic fractures in dialysis patients, **274**:300
Kirschner wires
biomechanical effects of, **283**:292
comparison of unidirectional and bidirectional insertion of, **284**:299
Knee
arthroplasty of
in acute intraarticular fractures, **276**:229
alumina ceramic in. *See* Ceramic prostheses
anterior cruciate ligament in, **276**:245
bone response around noncemented prosthesis, **283**:106
comparison of semiconstrained prostheses in, **281**:177
composite fixation of salvage prostheses, **276**:91
continuous passive motion affecting, **276**:225
current clinical perspectives in, **276**:26
dislocations of, **278**:128
flexion contractures in, **284**:221
infections treated with local antibiotics, **281**:216
long-term results of Manchester knee, **278**:138
patellar position and tracking in, **275**:211
polyethylene wear in PCA implants, **276**:126
posterior cruciate condylar design in, **281**:168
preoperative flexion affecting, **275**:204
prosthesis-bone interface in, **276**:50
pulmonary embolism in, **282**:158
and range of motion affected by implant design, **278**:147
results in adolescents, **283**:156
roentgen stereophotogrammetric analysis of fixation in, **276**:56
stress fracture of hip after, **281**:140
unicompartmental, **274**:238
unicondylar, cement techniques in, **284**:215
weight affecting outcome of, **276**:237
bilateral diskoid medial menisci, **285**:214
dislocation of
irreducible, **277**:197
traumatic, **284**:203
without PCL disruption, **284**:228
extension mechanics after subtotal patellectomy, **285**:217
fractures of, acute intraarticular, arthroplasty in, **276**:229
hemarthrosis in gout, **277**:262
hemophilic arthropathy of, synovectomy in, **283**:196
innervation of meniscus, **275**:232
Insall-Salvati ratio for patellar height, **282**:170
locked patellar dislocation, **279**:190
magnetic resonance imaging in asymptomatic subjects, **282**:177
McKeever patellar resurfacing prosthesis, **279**:201
meniscectomy in children and adolescents, **279**:180
noncemented fixation of implants with polyethylene sleeves, **284**:208
soft tissue management in tumor excision and reconstruction, **275**:226
testing on autopsy specimens, **282**:196
treatment of postoperative motion problems, **277**:217

L

Laminectomy, lumbar, neurologic complications of, **284**:14
Lasers, in placement of interlocking femoral screws, **281**:199
Latissimus dorsi transfer, for rotator cuff tears, **275**:152
Learning curve, for PCA hip arthroplasty, **282**:132
Legg-Calvé-Perthes disease, imaging with CT versus MRI, **274**:143
Letters to the Editor, **274**:311, **279**:310, **280**:310, **282**:310, **283**:309, **284**:310, **285**:280
Leukocytes, polymorphonuclear, respiratory bursts affected by implant metals, **280**:281
Leukotrienes, and inflammation in avascular necrosis, **281**:305
Ligament
coracohumeral contracture, **280**:182

fibroblasts affected by synovial fluid, **274**:294
immature, immobilization affecting, **277**:277
of knee. *See* Cruciate ligament
medial collateral
in dislocations of elbow, **280**:186
laxity of, and elbow instability, **278**:62
Ligamenta flava calcification, in Coffin-Lowry syndrome, **275**:144
Limb lengthening
Ilizarov method in. *See* Ilizarov fixator
somatosensory evoked potentials in, **285**:273
strength of distracted bones in, **275**:248
Loading, and bone modeling in rat tibia, **278**:253
Lottes nailing, in tibial shaft fractures, **279**:246
Lumbar spine
anterior fusion complications, **284**:47
flexion-distraction injuries, **284**:91
fusion with pedicle screw fixation, **284**:109
neurologic complications of laminectomy, **284**:14
Lumbosacral nerve root anomalies, **278**:46
Lupus erythematosus, osteonecrosis of femoral head in, **277**:89

M

Magnetic resonance imaging
after spine fixation, **279**:133
of bilateral diskoid medial menisci, **285**:214
compared to scintigraphy in osteonecrosis, **285**:30
in congenital dislocation of hip, **281**:26
of distal radioulnar joint, **275**:77
of hip, compared to CT studies, **274**:135
of knee, in aymptomatic subjects, **282**:177
in osteonecrosis of femoral head, **277**:54
in osteoporosis of hip, transient, **280**:223
in spinal degenerative disease, **279**:68
of titanium hip implants, **275**:194
Malalignment test, in angular deformities of lower limb, **280**:49
Manchester knee, long-term results of, **278**:138
Marfan syndrome, orthopedic aspects of phenotype, **277**:251
Mastocytosis, bone, **279**:281
Matrix gla protein in bone, **281**:287
Matrix vesicles, and bone induction, **277**:266
McKeever patellar resurfacing prosthesis, **279**:201
MEC-Ring acetabular component, in hip arthroplasty revision, **282**:114
Melorheostosis, Ilizarov apparatus in, **281**:163
Meniscectomy, in children and adolescents, **279**:180
Meniscus of knee joint
bilateral diskoid medial menisci, **285**:214
innervation of, **275**:232
Metacarpal bone
morphometry in anorexia nervosa, **278**:217
osteitis from foreign body, **278**:69
Metals
bone graft incorporation around titanium alloy-coated implants, **274**:282
cement-metal interface in hip arthroplasty, **285**:67
cobalt-alloy debris in hip revision arthroplasties, **276**:75
cobalt-chrome cable debris in hip arthroplasty, **285**:140
compared to ceramic prostheses, **282**:81
and respiratory burst activity of PMNs, **280**:281
sensitivity of airport metal detectors to, **280**:261
in tissue and synovial fluid, with well-fixed and loose cemented hip implants, **276**:66
titanium hip implants
imaging of, **275**:194
noncemented, evaluation of, **283**:49
Metatarsophalangeal joints, painful subluxation or dislocation of, **278**:164
Monorail bone transport system, **282**:233
Mortality in hip fractures, **280**:214
Motion
arm, cones and planes of, **284**:116
compensatory, in upper extremity, **281**:89
continuous passive
impact on knee arthroplasty, **276**:225
postoperative, and anterior cruciate ligament reconstruction stability, **277**:201
postoperative problems in knee, treatment of, **277**:217
range of, implant design affecting, in knee arthroplasty, **278**:147
scapulothoracic, analysis of, **285**:191
Mucolipidosis II, and bone changes in aging, **276**:283
Muscle
ankle plantar flexors after Achilles tendon rupture, **279**:237
biceps brachii. *See* Biceps brachii
force affected by tendon lengthening, **284**:247
functional neuromuscular stimulation affecting anterior tibial compartment pressure, **284**:181

intragluteal spindle cell hemangioendothelioma, **281**:224
Muscle transfer
in rotator cuff tears, **275**:152
in stabilization of distal ulna, **275**:130

N

Nailing
condylocephalic, in hip fractures, **283**:90
intramedullary
in distal femoral shaft fractures, **276**:277
and femoral malrotation assessment with CT, **279**:258
and fluted rod for femoral fractures, **285**:223
laser-guided screw placement in, **281**:199
locked nails compared to bracing in tibial shaft fractures, **277**:243
of tibial nonunions, **285**:236
unreamed, segmental transport after, **282**:233
in unstable tibial shaft fractures, **276**:267
locking nails in
compared to bracing in tibial shaft fractures, **277**:243
Grosse-Kempf nails for femoral and tibial fractures, **283**:86, 231
in subtrochanteric fractures of femur, **283**:231
for ulnar fracture fixation, **283**:81
Lottes nail in tibial shaft fractures, **279**:246
Necrosis of bone. *See* Osteonecrosis
Nerves
entrapment of lateral plantar nerve first branch, **279**:229
injury in lumbar laminectomy, **284**:14
injury in major pelvic fractures, **282**:222
lumbosacral nerve root anomalies, **278**:46
meniscus innervation, **275**:232
peroneal nerve relation to pin placement in tibia, **278**:134
pudendal nerve palsy after fracture table traction, **276**:272
spinal nerve root compression, **279**:35
Neurofibromatosis, orthopedic manifestations of, **278**:17
Nonunion
bone morphogenetic protein implants in, **277**:229
dynamic external fixation in, **278**:200
and effects of bone morphogenetic protein on cell cultures, **278**:286
tibial
infected, Ilizarov apparatus in, **280**:143
intramedullary nailing of, **285**:236

O

Occipitocervical area
fusion of, onlay technique in, **280**:170
instability in, **283**:63
Ochronosis, spine fracture in, **281**:208
Olecranon
fracture fixation in, **285**:229
stress fractures in throwers, **278**:58
tension band wiring of fractures, **277**:238
Onlay technique, in occipitocervical fusion, **280**:170
Ortolani's sign, and hip sonography in newborn, **279**:138
Osteitis, metacarpal, from foreign body, **278**:69
Osteoarthrosis
of hip, imaging with CT versus MRI, **274**:148
of knee, results of high tibial osteotomy in, **282**:186
Osteoblastoma of spine, **278**:37
Osteoblasts
pericytes as progenitor cells, **275**:287
pericytes as source of, **275**:280
Osteocalcin in bone, **281**:288
Osteochondritis
in congenital dislocation of hip, **281**:56
dissecans, in elbow, **284**:156
Osteochondrogenic periosteal-derived cells, **276**:291
Osteofibrous dysplasia of long bones, **278**:235
Osteolysis in implants, wear debris-induced, **276**:7
Osteoma, osteoid, staging and treatment of, **281**:229
Osteomyelitis
cavitary, Ilizarov method in, **280**:153
foreign-body implant affecting, **280**:289
Osteonecrosis
bipolar prostheses for, **277**:121
blood supply of femoral head in, **277**:22
in developmental hip dysplasia, **281**:11
early pathogenesis of, **277**:98
and eicosanoid role in inflammation, **281**:305
of femoral head, imaging with CT versus MRI, **274**:136
free vascularized fibula grafting in, **277**:128
hip arthroplasty in, **281**:145
history of research in, **277**:12

intraosseous arterial architecture in, **277**:79
intravascular coagulation in, **277**:41
magnetic resonance imaging and scintigraphy of, **277**:54
radiologic classification of, **277**:73
in rats, **277**:31
in renal transplant patients, hip arthroplasty in, **284**:164
repair of bone in, **277**:4
risk factors in lupus erythematosus, **277**:89
scintigraphy compared to MRI in, **285**:30
steroid-induced
multifocal, **279**:176
in rabbits, **277**:61
transtrochanteric osteotomy in, **277**:111
Osteonectin in bone, **281**:283
Osteopetrosis, hip arthroplasty in, **276**:214
Osteopontin in bone, **281**:275
Osteoporosis of hip, transient
in children, **275**:199
imaging with CT versus MRI, **274**:142
magnetic resonance imaging in, **280**:223
Osteosarcoma, small cell, intracortical, **279**:269
Osteotomy
closing vertebral wedge, in ankylosing spondylitis, **279**:122
cortical, in Ilizarov method, **280**:37
high tibial
cartilage regeneration after, **277**:210
preoperative planning for, **274**:248
ten-year results of, **282**:186
hip, planning with CT reconstruction, **274**:154
transtrochanteric rotational, in osteonecrosis of femoral head, **277**:111
valgus, with anterior cruciate ligament reconstruction, **278**:153

P

Paget's disease of bone, articular manifestations of, **285**:250
Pain
in back. *See* Back Pain
in heel, surgery for, **279**:229
in hip, from buttock claudication, **284**:176
Patella
alta, and recurrent dislocation, **274**:265
dislocation of, locked, with vertical axis rotation, **279**:190
donor site healing after anterior cruciate ligament reconstruction, **278**:160
Insall-Salvati ratio for, **282**:170
McKeever resurfacing prosthesis, **279**:201
position affecting tracking in knee arthroplasty, **275**:211
Patellectomy, subtotal, knee extensor mechanics after, **285**:217
Pavlik harness, in hip displacements, **281**:4, 29
Pediatric conditions
biodegradable fixation of physeal fractures in humerus, **283**:237
closed reduction of Tillaux fracture, **276**:262
foot-ground pressure pattern of flexible flatfoot, **278**:177
growth-plate activity in lower extremity, **275**:274
hip dislocation
congenital. *See* Hip, congenital dislocation or dysplasia
traumatic, **280**:208
hip sonography in infants, **274**:160, **279**:138, **281**:18, 22
Ilizarov method applications in, **280**:72
intraosseous arteriovenous malformation, **276**:307
irreducible "pulled elbow," **284**:153
meniscectomy in, **279**:180
osteopenia of hip joint, transient, **275**:199
physeal distraction for angular deformities, **283**:98
revision surgery in clubfeet, **283**:223
septic arthritis of hip joint, **281**:123
supracondylar humeral fractures, **278**:81
surgical treatment of flatfoot, **283**:34
Pedicle screw fixation in spinal surgery, **284**:34, 109
MRI findings after, **279**:133
Pelvis
hydatid bone disease of, **280**:251
major injuries of, neurologic deficits in, **282**:222
Pericytes
as osteoblast progenitor, **275**:287
as source of osteoblasts, **275**:280
Periosteal-derived cells, osteochondrogenic, **276**:291
Peroneal compartment syndrome, forced march-induced, **284**:189
Peroneal nerve, relation to pin placement in tibia, **278**:134
Physeal defects, fat interposition in, **282**:304
Physeal distraction, for angular deformities, **283**:98

Physeal fractures of humerus, biodegradable fixation of, **283**:237
Pin fixation
external fixator pin design, **278**:305
in hand and wrist, complications of, **276**:194
intramedullary, in unstable tibial shaft fractures, **276**:267
placement in proximal tibia, **278**:134
in slipped capital femoral epiphysis, **281**:115
Piroxicam, affecting chondrocyte metabolism, **277**:298
Plantar nerve, lateral, release of first branch for chronic heel pain, **279**:229
PMMA, in reinforcement of cancellous screws, **284**:260
PMMA beads
antibiotic
diffusion from, **278**:244
elution characteristics of, **284**:303
bacterial adherence to, **278**:260
PMMA grafts, in anterior spine surgery, **284**:54
Polyglycolide fracture fixation screws, **285**:263
Pregnancy, acetabular fracture in, **282**:229
Preload testing, accuracy of, **279**:214
Preservation of tissues
cryopreservation of articular cartilage, **283**:11
and transplantations, **278**:2
Pronator quadratus transfer, for stabilization of distal ulna, **275**:130
Proprioception, lower limb, in above-knee amputees, **284**:239
Prostaglandins
and inflammation in avascular necrosis, **281**:305
PGE_2 production in arthroplasty, **284**:283
role in fracture repair, **277**:300
Prostheses
bone graft incorporation around, **274**:282
ceramics in. *See* Ceramic prostheses
low viscosity cement for, **276**:4. *See also* Cement
mediators of bone resorption around, **281**:295
metals in. *See* Metals
noncemented polyethylene-sleeved implants, **284**:208
sensitivity to airport metal detectors, **280**:261
ultrastructure of bone-implant interface, **276**:147
unicompartmental types affecting strain distribution in tibia, **279**:194
Pseudarthrosis
after spinal arthrodesis, **284**:3, 80
of tibia, congenital, Ilizarov technique in, **280**:81
Pseudotumor, hemophilic, of ilium, **284**:234
Pudendal nerve palsy, after fracture table traction, **276**:272
Pulmonary embolism
after hip arthroplasty, **276**:222
in hip and knee arthroplasties, **282**:158
Pyarthrosis, arthroscopic management of, **275**:243
Pycnodysostosis, orthopedic aspects of, **280**:263

R

Radiation, low-dose, in heterotopic bone prophylaxis after hip arthroplasty, **280**:230
Radiography
in congenital dislocation of hip, **281**:24
digital documentation of hip arthroplasty, **274**:15, 113
fallen wire sign in hip prosthetic loosening, **284**:161
in femoral trochlear dysplasia, **281**:159
in osteonecrosis classification, **277**:73
in prediction of back injury claims, **283**:124
roentgen stereophotogrammetric analysis of prosthetic fixation, **276**:56
of scapular anatomy, **277**:142
stress studies of shoulder joint, **284**:136
Radionuclide scanning. *See* Scintigraphy
Radiotolerance of articular cartilage, **275**:300
Radioulnar joint, distal
anatomy of, **275**:14, 37
arthroplasty of, **275**:104
biomechanics of, **275**:46
blood supply of articular disk, **275**:19
Darrach procedure in ulnar pathology, **275**:3, 85
diagnostic studies and treatment rationale, **275**:74
dislocations of, complex, **275**:90
evolution of, **275**:5
histologic structure of articular disk, **275**:29
management of deformity after Colles' fracture, **275**:3
radial head fractures affecting, **275**:79
relation to forearm, **275**:56
Sauvé-Kapandji procedure for, **275**:110
stabilization by muscle transfer, **275**:130

traumatic disruption of triangular fibrocartilage complex, **275**:65
"wafer" procedure for, **275**:124
Radius, fractures of
external fixation of unstable distal fractures, hand and wrist function after, **285**:200
at head, affecting distal radioulnar joint, **275**:79
with ipsilateral scaphoid fracture, **282**:219
at neck, internal fixation of, **276**:187
Rancho mounting technique, for Ilizarov fixator, **280**:104
Range of motion, implant design affecting, in knee arthroplasty, **278**:147
Rheumatoid arthritis
Achilles tendon rupture in, **280**:235
of hip, imaging with CT versus MRI, **274**:149
uncemented hip arthroplasty in, **277**:166
Rib perichondrial grafts, for cartilage defects, **275**:263
Robot development, for cementless hip arthroplasty, **285**:57
Rotator cuff tears
conservative treatment of, **275**:165
incomplete, **284**:128
kinematic patterns in, **284**:144
muscle transfer in, **275**:152
ultrasonography of, **282**:110
Runners, Achilles tendinitis in, **282**:208

S

Sarcoma
Ewing's, second cancers in, **274**:275
small cell intracortical osteosarcoma, **279**:269
and soft tissue management in limb-salvage procedures at knee, **275**:226
Sauvé-Kapandji procedure, for distal radioulnar joint, **275**:110
Scaphoid fracture, with ipsilateral radius fracture, **282**:219
Scapula
fractures of, **283**:139
radiographic anatomy of, **277**:142
Scapulothoracic motion, analysis of, **285**:191
Sciatic neuropathy, from spontaneous gluteal artery rupture, **275**:253
Scintigraphy
of bone response around noncemented knee prosthesis, **283**:106
compared to MRI in osteonecrosis, **285**:30
in osteonecrosis of femoral head, **277**:54
Scoliosis
adolescent idiopathic, collagen genes in, **274**:305
electrical stimulation in, **276**:176
posterior spinal instrumentation in, **284**:24
Screw fixation
absorbable devices in fractures, **285**:263
and MRI findings with pedicular screws for spine, **279**:133
reinforcement of cancellous screws, **284**:260
Semitendinosus tendon, with Kennedy-LAD in anterior cruciate ligament reconstruction, **283**:21
Shoe shock attenuation, preventing overuse injuries of foot, **281**:189
Shoulder
adhesive capsulitis of, **282**:105
analysis of scapulothoracic motion, **285**:191
arthroplasty of, Kessel prosthesis in, **277**:155
electromyography of, **284**:116
hinged spica cast for, **278**:9
radiographic anatomy of scapula, **277**:142
results of anterior acromioplasty, **278**:14
stress radiography of, **284**:136
tears of rotator cuff. *See* Rotator cuff tears
Sialoprotein in bone, **281**:280
Skiing, cross-country, rupture of anterior tibial tendon in, **281**:193
Somatosensory evoked potentials, in limb lengthening, **285**:273
Spanish surgery, **283**:2
bone response around noncemented knee prosthesis, **283**:106
chemonucleolysis failures, **283**:74
condylocephalic nailing in hip fractures, **283**:90
cryopreservation of articular cartilage, **283**:11
evaluation of titanium noncemented hip prosthesis, **283**:49
experience in hip arthroplasties, **283**:57
experimental production of heterotopic bone, **283**:4
flatfoot treatment in childhood, **283**:34
Grosse-Kempf locking nails in femoral and tibial fractures, **283**:86
Ilizarov technique, **283**:116
LD hip arthroplasty, **283**:39
locking nail fixation of ulnar fractures, **283**:81
in occipitocervical instability, **283**:63
physeal distraction for angular deformities, **283**:98

semitendinosus LAD-ACL reconstruction, **283**:21

Spica cast, shoulder, hinged, **278**:9

Spinal canal
epidural compression in, **275**:140
stenosis of, lumbar
indications for spine fusion in, **279**:92
natural course of, **279**:82

Spindle cell hemangioendothelioma, intragluteal, **281**:224

Spine
ankylosing spondylitis. *See* Spondylitis, ankylosing
anterior cervical disk removal and fusion, **284**:10
anterior intervertebral grafting, **284**:54
anterior lumbar fusion complications, **284**:47
in back pain. *See* Back pain
bone-fibrin mixture in surgery of, **275**:133
burst fractures, acute, **276**:169
chemonucleolysis
complications of, **284**:63
failures of, **283**:74
complications of surgery in, **284**:2
diskitis from *Eikenella corrodens,* **280**:175
facet syndrome, **279**:110
fracture in ochronosis, **281**:208
giant-cell tumors of, **278**:29
growing end plates affected by repetitive strains, **279**:303
lumbar flexion-distraction injuries, **284**:91
lumbosacral nerve root anomalies, **278**:46
neurologic complications of lumbar laminectomy, **284**:14
occipitocervical fusion with onlay technique, **280**:170
occipitocervical instability, **283**:63
operative approach to upper thoracic segments, **279**:127
osteoblastoma of, **278**:37
pedicle screw fixation, **284**:34, 109
MRI findings after, **279**:133
percutaneous diskectomy, **284**:75
posterior instrumentation for scoliosis, **284**:24
postoperative infections, **284**:99
pseudarthrosis after arthrodesis, **284**:3, 80
reproducible porcine fracture, **284**:267
in scoliosis. *See* Scoliosis
surgery of, perioperative blood salvage in, **278**:51

Spondylitis, ankylosing
closing wedge osteotomy in, **279**:122
hip arthroplasty in, ceramic versus metal-propyethylene prostheses in, **282**:81

Spondylolisthesis, indications for spine fusion in, **279**:93

Sternoclavicular epiphyseal separation, posterior, **281**:84

Sternotomy, manubrial, in approach to upper thoracic spine, **279**:127

Stinchfield, Frank E., **285**:11

Strain
distribution in tibia, **279**:194
repetitive, affecting growing vertebral end plates, **279**:303

Stress fracture
fibular, synostosis-induced, **281**:195
of hip, after knee surgery, **281**:140
olecranon, in throwers, **278**:58

Stress shielding with hip implants
and bone resorption, **274**:79, 124
cemented, **274**:120
determinants of, **274**:202
noncemented, **274**:79

Stroke patients, foot deformities in, **282**:213

Subluxation
elbow, mechanisms in, **280**:186
tibial, in posterior cruciate-deficient knee, **284**:193

Sutures
elongation affecting accuracy of isometers, **279**:214
placement in flexor tendon repair, **280**:198

Synostosis, tibiofibular, and fibular stress fracture, **281**:195

Synovectomy, in hemophilic arthropathy of knee, **283**:196

Synovial chondromatosis, ultrastructural morphology of, **276**:299

Synovial fluid
affecting ligament fibroblasts, **274**:294
bone resorptive factors in, **284**:273

Synovitis, pigmented villonodular, of hip, **275**:180

T

Talipes deformity, revision surgery in, **283**:223

Teicoplanin, in plaster of paris beads, **282**:241

Tendons
Achilles. *See* Achilles tendon

anterior tibial rupture in cross-countrty skiing, **281**:193
lengthening of, affecting muscle force and joint movements, **284**:247
patellar tendon donor site healing after anterior cruciate ligament reconstruction, **278**:160
suture placement in flexor tendon repair, **280**:198
Tennis elbow
persistent, surgery in, **278**:73
stroke modification in, **276**:182
Tenosynovitis, flexor, gonococcal, in adolescent male, **281**:212
Tension isometers, accuracy of, **279**:214
Thromboembolism prevention
in hip arthroplasty, **274**:35, **277**:188
and low-molecular-weight heparin in hip fracture surgery, **278**:95
Thrombospondin in bone, **281**:281
Throwers, olecranon stress fractures in, **278**:58
Tibia
diaphyseal fractures of, Ilizarov fixator in, **280**:125
fractures of shaft
bracing versus locked nailing in, **277**:243
Lottes nailing in, **279**:246
unstable, intramedullary pinning of, **276**:267
Grosse-Kempf locking nails in fractures of, **283**:86
growth-plate activity in, **275**:274
hemangioma of, **280**:256
high osteotomy of
cartilage regeneration after, **277**:210
preoperative planning for, **274**:248
ten-year results of, **282**:186
Ilizarov method in fracture treatment, **278**:207
multiapical deformities of, **280**:65
nonunions in
infected, and segmental defects treated with Ilizarov method, **280**:143
intramedullary nailing of, **285**:236
pin placement related to peronal nerve, **278**:134
pseudoarthrosis of, congenital, Ilizarov technique in, **280**:81
segmental fractures of, **281**:204
small cell osteosarcoma of, intracortical, **279**:269
strain distribution in, **279**:194
subluxation in posterior cruciate-deficient knee, **284**:193
uniapical angular deformities of, **280**:48
Tibial compartment pressure, functional neuromuscular stimulation affecting, **284**:181
Tibial tendon, anterior, rupture in cross-countrty skiing, **281**:193
Tibial tunnel placement, in anterior cruciate ligament reconstruction, **283**:187
Tillaux fracture, juvenile, closed reduction of, **276**:262
Titanium alloy-coated implants, bone graft incorporation around, **274**:282
Titanium hip implants
imaging of, **275**:194
noncemented, evaluation of, **283**:49
Torticollis, vascular complications after correction of, **275**:258
Traction, fracture table, pudendal nerve palsy after, **276**:272
Transplantation
and preservation of tissues, **278**:2
cryopreservation of articular cartilage, **283**:11
renal, and hip arthroplasty in osteonecrosis, **284**:164
Trapezial ridge, fracture of, **276**:202
Trauma. *See also* Dislocation; Fracture
calcium levels after, **275**:306
triangular fibrocartilage complex disruption at wrist, **275**:65
Trigger digit, congenital, **285**:205
Trigonal process fracture, with anterior ankle dislocation, **278**:171
Trochlear dysplasia, femoral, **281**:159
Tumors
giant-cell
of capitate, **279**:264
of hand, benign metastasizing, **274**:270
of spine, **278**:29
hemangioma of long tubular bone, **280**:256
of hip, imaging with CT versus MRI, **274**:146
ossifying fibroma of long bones, **278**:235
osteoblastoma of spine, **278**:37
second cancers in Ewing's sarcoma, **274**:275
small cell osteosarcoma, intracortical, **279**:269
and soft tissue management in limb-salvage procedures at knee, **275**:226
spindle cell hemangioendothelioma, intragluteal, **281**:224
staging and treatment of osteoid osteoma, **281**:229

U

Ulna. *See also* Radioulnar joint, distal
locking nail fixation of fractures in, **283**:81

Ulnar nerve decompression, at cubital tunnel, **274**:231
Ultrasonic technology in joint arthroplasty, **285**:147
Ultrasonography
of hip, in infants, **274**:160, **279**:138, **281**:18, 22
of rotator cuff tears, **282**:110

V

Valgus osteotomy, with anterior cruciate ligament reconstruction, **278**:153
Vasculature
arterial architecture in osteonecrosis, **277**:79
atypical deep hamartomata, **280**:247
complications after torticollis correction, **275**:258
damage and fibrosis in spinal tissue, **279**:40
of distal radioulnar joint, **275**:19
femoral head blood supply in osteonecrosis, **277**:22
intraosseous arteriovenous malformation in childhood, **276**:307
spontaneous gluteal artery rupture, **275**:253
Vasculitis, and steroid-induced osteonecrosis in rabbits, **277**:61
Vibration, back pain from, **279**:49

W

"Wafer" procedure, for distal radioulnar joint, **275**:124
Weight, and outcome of knee arthroplasty, **276**:237
Wiring
configuration affecting Ilizarov fixator stability, **279**:299
factors affecting tensioned wires, **280**:23
Kirschner-wire fixation
biomechanical effects of, **283**:292
comparison of unidirectional and bidirectional insertions, **284**:299
tension band, in olecranon fractures, **277**:238
Wound healing. *See* Healing
Wrist. *See also* Radioulnar joint, distal
complications of pin fixation in, **276**:194
function after external fixation of unstable distal radial fractures, **285**:200
giant-cell tumors of capitate, **279**:264
trapezial ridge fracture, **276**:202

Author Index—Volumes 274–285

A

Abad, I., **283:**49
Abdelwahab, I. F., **280:**256
Abe, M., **275:**300
Abitbol, J.-J., **284:**54, 91, 99
Abrams, R. A., **276:**194
Adams, K., **278:**244
af Ekenstam, F., **275:**14
Agapitos, M. V., **275:**232
Agarwal, S., **280:**251
Aguirre, M., **283:**90
Aharonson, Z., **278:**177
Akin, J. E., **285:**48
Albanese, S. A., **282:**304; **285:**217
Albright, J. P., **279:**180
Al-Duri, Z., **275:**220
Alexander, A. H., **275:**90
Alho, A., **277:**243
Allard, R. N., **280:**30
Allen, W. C., **285:**223
Almekinders, L. C., **284:**203
Almquist, E. E., **275:**5
Alpert, B., **284:**164
Altchek, M., **282:**311
Amiel, D., **275:**263
Amor, B., **279:**303
Amstutz, H. C., **276:**7; **280:**200; **282:**114, 123
An, K.-N., **280:**186; **281:**89
Anderson, D., **277:**155
Anderton, J. M., **283:**252
Andre-Deshays, C., **279:**303
Ang, E. J., **279:**223
Anouchi, Y. S., **275:**211
Aono, M., **282:**95
Aprin, H., **278:**69
Arcan, M., **278:**177
Arevalo, M. A., **283:**74
Argnani, F., **280:**81
Arlet, J., **277:**12
Armstrong, P., **280:**81
Armstrong, P. F., **280:**72
Arney, C., **281:**239
Arnold, D. M., **278:**108
Arokoski, J., **283:**302
Aronson, D. D., **281:**115
Aronson, J., **280:**23, 153
Arslanian, L. E., **285:**191
Artul, H. J., **280:**263
Asajima, S., **280:**235
Ashby, M. E., **276:**214
Asir, B., **279:**138
Askew, M. J., **276:**237
Assimakopoulos, A. P., **275:**232
Aston, J. W., Jr., **280:**30
Atar, D., **280:**94; **281:**163; **283:**223; **285:**210
Atkinson, J. R., **276:**115
Atsumi, T., **277:**22
Attie, M. F., **278:**217
Au, M.-K., **280:**200
Aurori, B. F., **276:**272
Avruch, L., **281:**48

B

Bachner, E. J., **283:**261
Baker, J. A., **280:**241
Balderston, R. A., **276:**229; **278:**128; **282:**158
Bankston, A. B., **276:**277
Bansal, M., **276:**75, 157; **280:**223
Barber, S. D., **277:**217
Bargar, W. L., **285:**57
Bar-On, E., **281:**97
Barrack, R. L., **283:**163
Barry, R. J., **284:**189
Barth, R. W., **283:**178
Bascoulergue, G., **282:**241
Bassett, G. S., **281:**84
Bastos, M. N., **283:**21
Battie, M. C., **279:**21
Bauer, M., **284:**156
Bauer, T. W., **274:**97
Bauman, T., **284:**54
Baxter, D. E., **279:**229
Bayon, P., **279:**223
Beals, R. K., **278:**101
Bear, R. A., **284:**164
Bechtold, J. E., **280:**281
Becich, M. J., **279:**269
Becker, V., **279:**122
Beecher, P. J., **283:**124
Behrman, M. J., **278:**51
Belec, L., **285:**129
Bell, A. L., **280:**241
Bell, D., **280:**81
Bell, D. F., **280:**72
Bello, S., **283:**106
Belsky, M. R., **275:**124
Beluffi, G., **276:**283
Bennett, J. B., **278:**62
Bennett, J. T., **280:**208
Bennett, O. M., **281:**123
Benterud, J. G., **277:**243
Berchuck, M., **284:**54
Berg, E. E., **278:**160
Berkowitz, R. D., **279:**254
Bernhardt, M., **284:**109
Bert, J. M., **283:**310
Bertrand, S. L., **276:**176
Betts, F, **276:**66, 75, 157
Bigliani, L. U., **285:**181
Bigos, S. J., **279:**21; **283:**124
Bjerregaard, P., **278:**95
Black, K. P., **283:**265
Blacksin, M. F., **285:**214
Blasier, D., **284:**189
Bloebaum, R. D., **274:**97
Bobyn, J. D., **274:**79, 97; **285:**13
Boden, S. D., **280:**277; **282:**177
Boettcher, W. G., **274:**30
Bohn, W. W., **285:**155
Booth, R. E., Jr., **276:**229; **278:**128; **282:**158
Boriani, S., **278:**37
Bortel, D. T., **279:**310
Boskey, A., **276:**75
Boskey, A. L., **281:**244
Böstman, O., **283:**237
Böstman, O. M., **278:**193; **285:**263

Botelho, G., 285:214
Botte, M. J., 276:194, 202
Bourgois, R., 282:273
Bourne, R. B., 281:145
Bowen, J. R., 277:251; 278:17; 280:247
Bowers, W. H., 275:104
Boyan, B. D., 277:266; 278:286
Boyd, A. D., Jr., 275:180
Bragdon, C. R., 274:60; 280:300
Braun, R. M., 275:74
Breck, L. W., 285:4
Brien, W. W., 274:35; 276:66; 277:188; 283:231
Brighton, C. T., 275:287; 285:255
Brockstedt-Rasmussen, H., 274:282
Broeng, L., 278:95
Brooker, A. F., Jr., 285:236
Brooks, C. E., 274:79
Broström, L.-A., 277:155
Brown, H. R., 277:142
Brown, M. D., 284:63
Brown, S. D., 282:177
Brown, T. D., 280:241
Bruckner, J. D., 275:90
Budney, D., 284:267
Bullough, P., 276:66
Bulstra, S. K., 277:289
Bulstrode, C. J. K., 276:210
Buly, R., 276:66
Bünger, C., 274:282
Bunin, N. J., 283:276
Burgeson, R. E., 282:250
Burkhart, S. S., 277:238; 284:144
Burstein, A. H., 276:2
Buurman, W. A., 277:289

C

Cabadas, M. I., 283:39
Cady, R. B., 282:304
Cage, D. J. N., 283:156
Caillouette, J. T., 285:147
Cairns, E. R., 278:134
Caizzo, V. J., 279:237
Calhoun, J., 278:244
Calhoun, J. H., 280:15, 117
Callaghan, J. J., 276:33; 282:132; 285:147
Cameron, J. C., 274:265
Camous, J.-Y., 281:56
Campbell, D. D., 282:310
Campbell, P., 276:7
Campion, E. R., 279:180
Canadell, J., 283:98
Capanna, R., 278:37
Capello, W. N., 285:102
Caplan, A. I., 276:291
Carey, T. P., 281:11
Carnes, D. L., Jr., 277:266; 278:286
Carollo, J. J., 280:30
Carr, A. J., 274:305
Carrel, A., 278:2
Carrera, L. L., 283:90
Carroll, S. E., 284:14
Carter, A., 278:9
Cash, J. D., 280:208
Castello, A., 276:283
Castillo, R. N., 283:124
Castle, T. H., Jr., 284:193
Catagni, M., 280:81, 143
Cattaneo, R., 280:143
Chang, C.-H., 285:48
Chao, E. Y. S., 276:91; 285:91
Chen, W.-J., 278:235
Chen, W.-S., 285:281
Chin, H.-C., 285:91
Chin, R. C., 284:283
Choi, I. H., 285:273
Chotigavanich, C., 278:46
Christel, P., 282:53
Christel, P. S., 282:10
Christodoulou, G., 283:149
Chung, D. W., 277:128
Chung, S. S., 285:273
Cierny, G., 278:244
Clark, C. C., 285:255
Clark, J. A., 283:187
Clarke, I. C., 276:7
Clarke, I. C., 282:19
Claudi, B. F., 282:233
Clayton, M. L., 281:133, 168
Clothiaux, P. L., 284:109
Coci, A., 276:283
Cody, D. D., 283:244
Cohen, M. S., 276:202
Collier, J. P., 274:97; 285:129
Collis, D. K., 282:164
Colwell, C. W., Jr., 276:225; 278:111
Colwill, J. C., 281:107
Cook, S. D., 274:97; 283:163
Cooke, F. W., 276:135
Cooper, D. E., 284:228
Cooper, R. E., 284:303
Cooperman, A. M., 283:244
Cornell, C. N., 277:297
Corpe, R. S., 281:212
Corso, S. J., 279:190
Costerton, J. W., 280:289
Couch, L., 278:244
Court-Brown, C. M., 285:200
Coutts, R. D., 275:263
Coventry, M. B., 274:22; 285:7
Cox, R. S., 274:275
Coya, J., 283:106
Cracchiolo, A., III, 277:166; 280:160
Crowell, R. R., 284:109
Cuckler, J. M., 276:102
Cuellar, A. D., 285:40

D

Dacquet, V., 282:241
Dalsey, R. M., 280:182
Daly, P. J., 278:164
Dameron, T. B., Jr., 278:81
Daniels, J., 281:239
D'Antonio, J. A., 285:102
Darrach, W., 275:3
Davey, J. R., 281:112
Davidson, R. S., 274:311
Davis, D. O., 282:177
Davis, J. D., IV, 284:221
Davis, J. L. W., 276:194
de Gennes, C., 279:281
Degnan, G. G., 279:258
Dekel, S., 285:210
Delince, P. E., 281:140
Delloye, C., 282:273
Delp, S. L., 284:247
De Lucas, F. G., 283:81
Dennis, D. A., 281:133, 168
de Pablos, J., 283:98
DePalma, A. F., 284:3
De Pedro, J. A., 283:81
Deutsch, S. D., 276:176
de Vernejoul, M. C., 279:281
Dhar, S., 283:252
d'Hemricourt, J., 282:273
Diaz-Flores, L., 275:280
DiChristina, D. G., 277:139
Dickens, R., 281:29
DiGiacinto, G. V., 275:140
Diment, M. T., 278:58
Dina, T. S., 282:177
Dominguez, J., 283:74
Donaldson, S. S., 274:275
Donaldson, W. F., III, 278:111
Donati, D., 278:37
Dooley, R. L., 274:113
Dorey, F. J., 280:200; 282:114, 123
Dorlot, J-M., 282:47
Dowson, D., 276:115
Doyle, J., 284:181
Drummond, D. S., 283:276
Drvaric, D. M., 276:176
Ducheyne, P., 276:102
Duck, H. J., 282:145
Dugdale, T. W., 274:248; 279:258
Du Toit, G. T., 274:311
Duwelius, P. J., 281:204
Dwyer, K. A., 275:204
Dysart, S. H., 282:132

E

Eakin, C. L., **284:**239
Eaton, R. G., **275:**85
Ebraheim, N. A., **275:**194; **276:**187; **278:**134; **279:**133
Eckardt, J. J., **275:**253; **277:**161
Edelson, J. G., **280:**263
Eftekhar, N. S., **285:**7, 11
Egund, N., **277:**210
Ehlert, K. J., **283:**265
Eilert, R. E., **281:**97
Eisenstein, S., **279:**122
Ekeland, A., **277:**243
Ekelund, A., **281:**101; **284:**288
Ekelund, A. L., **282:**105
El Blidi, S., **281:**56
Eldad, A., **281:**189
Elia, M., **280:**170
El-Khoury, G. Y., **279:**180
Emerson, R. H., Jr., **285:**40
Eng, H.-L., **285:**281
Engel, C., **274:**113
Engh, C. A., **274:**79; **275:**187; **284:**311; **285:**13, 164
Engh, G. A., **275:**204
Enzenauer, R. J., **281:**212
Erickson, L. C., **278:**253
Espinar, E., **283:**49
Esses, S. I., **279:**87
Esteller, A., **283:**49
Evans, E. B., **280:**117
Evans, R. P., **282:**154
Evenson, R., **284:**267
Exarchou, E. I., **275:**232

F

Fabian, D. R., **274:**213
Faghri, M., **278:**260
Fallon, M. D., **280:**277; **285:**250
Fdez-Arroyo, J. M. F., **283:**39
Feldon, P., **275:**124
Fenning, J. B., **283:**309
Fenwick, J., **282:**196
Fernandez-Baíllo, N., **283:**116
Fernandez-Baillo, N., **283:**106
Ferrández, L., **283:**74
Fielding, J. W., **280:**170; **284:**2, 10
Finerman, G. A. M., **277:**229
Finestone, A., **281:**189
Finkle, J. E., **278:**265
Firestone, T. P., **284:**221
Fisher, L. D., **279:**21
Fitzgerald, J. A., **282:**304
Flandry, F., **279:**214
Flatow, E. L., **280:**182; **285:**181
Fleming, B., **278:**305
Fleming, B. C., **282:**196
Flynn, M. J., **283:**244
Fordyce, W. E., **279:**21
Forman, D., **279:**190
Fournier, L., **282:**241
France, M. P., **276:**272
Frank, C., **274:**294; **277:**277
Frankel, V. H., **274:**213; **278:**265; **279:**299
Freeman, M. A. R., **276:**19
Friberg, S., **275:**237; **279:**3
Froimson, A. I., **283:**261
Fry, P. J., **276:**267
Frymoyer, J. W., **279:**60, 101
Fujita, T., **279:**144
Fujita, Y., **278:**226
Furuya, K., **282:**213

G

Gaekwad, U. H., **276:**169
Gagliardi, S., **282:**81
Galante, J. O., **274:**97, 202; **276:**41, 83
Gallannaugh, C., **281:**177
Gannon, F. H., **285:**250
Garcia-Cimbrelo, E., **279:**163; **283:**116
García-Cimbrelo, E., **283:**116
García-Girón, J., **274:**270
Garcia-Navarrete, F., **283:**81
Garfin, S. R., **284:**2, 54, 91, 99
Garvin, K., **276:**66
Gay, S., **285:**30
Gebhard, J. S., **282:**123
Geel, C. W., **275:**79
Geiger, R., **280:**263
Gellman, H., **276:**192, 194, 202
Genant, H. K., **274:**135
Georgopoulos, G., **278:**81
Gerber, C., **275:**152
Gerdes, M. H., **280:**241
Gerhart, T. N., **284:**260
Ghose, T., **282:**219
Gill, C. A., **280:**15
Gillquist, J., **279:**194; **283:**207
Gilula, L. A., **279:**269
Glassman, A. H., **274:**7; **285:**164
Gloster, E. S., **278:**69
Go, G., **274:**35; **277:**188
Godfrey, L. W., **280:**175
Goh, J. C. H., **279:**223
Gold, R. H., **284:**161
Goldberg, I., **282:**229
Goldberg, M. J., **276:**307
Goldberg, V. M., **276:**291
Goldmann, D., **285:**250
Goldstein, S. A., **276:**50; **283:**244
Gómez-Castresana, F. B., **283:**21
González, J. I. N., **283:**57
Gonzalez, R., **275:**280
Goodfellow, J., **276:**245
Goodman, S. B., **277:**175; **284:**283
Gordon, L. H., **284:**116
Gould, J. S., **283:**265
Goulet, J. A., **281:**199
Govaerts, B., **282:**273
Gradisar, I. A., Jr., **276:**237
Gradisar, J. S., **276:**237
Graebe, A., **283:**292
Graf, R., **281:**18
Graham, G., **281:**239
Graham, H. K., **275:**306
Granado, J., **283:**39
Granberry, W. M., **283:**156
Grande, M. M., **283:**49
Grant, A. D., **280:**94; **281:**163; **283:**223
Green, M. S., **278:**62
Green, S. A., **280:**2, 104, 136
Greene, B., **285:**214
Greene, W. B., **278:**81
Greenleaf, J., **279:**254
Greer, R. B., III, **283:**196
Greis, P. E., **274:**47
Grelsamer, R. P., **281:**159; **282:**170
Griffin, F. M., **284:**303
Grimer, R., **284:**208
Griss, P., **282:**73
Groh, G. I., **285:**223
Grood, E. S., **284:**193
Gross, S. B., **283:**276
Gualtieri, G., **282:**81
Gualtieri, I., **282:**81
Guelen, P. J. M., **277:**289
Guemes-Gordon, F., **274:**270
Guidera, K. G., **281:**11
Guille, J. T., **280:**247
Gustilo, R. B., **280:**281
Gutierrez, R., **275:**280

H

Habernek, H., **274:**226
Haddad, J. G., **280:**277; **285:**250
Ha'Eri, G. B., **277:**197
Hagen, K., **278:**95
Hagert, C.-G., **275:**56
Hahn, C. S., **277:**128
Haire, T. C., **274:**60
Halsey, D., **278:**305
Hamard, G., **279:**303
Han, T. R., **285:**273
Handal, J. A., **283:**196
Hanks, G. A., **281:**195; **283:**145, 196
Hansen, E. S., **274:**282
Hanson, W., **285:**57

Hansson, T., 279:21; 283:124
Hansson, T. H., 279:49
Harcke, H. T., 281:22
Hardt, A. B., 278:253
Hardy, D. C. R., 281:140
Harp, J. H., Jr., 280:23
Harrington, K. D., 279:201
Harris, I. E., 281:29
Harris, N. L., 280:104
Harris, W. H., 274:6, 60, 97, 120; 280:230, 300; 281:112; 285:13, 67, 116
Harrison, B. H., 284:303
Hart, D., 277:277
Hashimoto, J., 278:274
Havránek, P., 283:270
Hayes, W. C., 284:260
Head, W. C., 274:97; 285:40
Healey, J. H., 275:226
Heckman, J. D., 278:286
Heegaard, A.-M., 281:275
Heekin, R. D., 282:132
Heinrich, S. D., 281:34
Heller, J. G., 284:91, 99
Helminen, H. J., 283:302
Henderson, R. C., 279:180
Henderson, S. A., 275:306
Hendriks, M., 282:81
Henning, C. E., 277:201
Henrikson, B., 283:270
Henry, S. L., 278:260
Herkowitz, H. N., 284:80
Herndon, D. N., 280:117
Herndon, J. H., 276:176
Herring, J. A., 281:41
Hill, I. D., 278:88
Hirano, T., 277:31
Hirohata, K., 276:299
Hirsch, C., 279:3
Hoeffel, J. C., 274:311
Holiday, A. D., Jr., 278:183
Hopkinson, W. J., 282:132
Horowitz, S. M., 275:226
Hotokebuchi, T., 277:111
Howard, M. W., 279:246
Howe, J. G., 282:196
Howell, S. M., 283:187
Hozack, W. J., 276:229; 278:128; 282:158; 285:147
Høgevold, H. E., 277:243
Huiskes, R., 274:124
Hukuda, S., 279:144; 280:235
Huler, R. J., 279:87
Hulsey, R. E., 281:216
Hume, M., 276:192
Hume, M. C., 285:229
Hungerford, D. S., 284:221
Hunt, B. J., 279:237
Huo, M. H., 274:35; 276:157; 277:188

I

Ibaraki, K., 281:275
Ilfeld, F. W., 276:182
Ilizarov, G. A., 280:7
Inglis, A. E., Jr., 284:208
Inoue, A., 284:273
Insall, J. N., 276:26
Isaac, G. H., 276:115
Ishida, Y., 275:144
Ishiguro, N., 284:234
Ishkanian, J., 280:104, 136
Itoh, A., 284:234
Itoi, E., 275:165; 284:128
Ivarsson, I., 279:194
Iwasaki, K., 277:31
Iwata, H., 284:234
Iyama, K.-i., 279:292

J

Jackson, J. M., 280:136
Jackson, R. P., 279:110
Jackson, T., 276:187
Jackson, W. T., 275:194; 278:134; 279:133
Jacobs, Joshua, 276:41
Jacobson, J., 284:176
Jaffe, W. L., 285:102
Jaffray, D., 279:122
Jahnke, A. H., Jr., 276:267
Jalovaara, P., 284:136
James, S. L., 278:153
Jarvis, J., 281:48
Jasty, M., 274:60; 280:230, 300; 285:13, 116
Jasty, Murali J., 274:97
Jayson, M. I. V., 279:40
Jehl, F., 282:241
Jensen, R. E., 285:129
Jergesen, H. E., 274:135
Jiranek, W., 285:116
Johnson, E. E., 277:229; 280:143, 160
Johnson, K. A., 278:164
Johnson, R. J., 282:196
Johnson, R. K., 275:2, 130
Johnson, R. P., 285:244
Johnsson, K.-E., 279:82
Johnston, R., 274:231
Johnston, R. C., 285:140
Jones, A. R., 275:287
Jones, H. H., 277:175
Jones, J. P., Jr., 277:41
Jonsson, K., 284:156
Jorda, E., 283:49
Josefsson, P. O., 284:156
Joseph, K. N., 277:251; 278:17
Josephsen, L., 278:95
Joshi, R., 274:294
Jørgensen, P. K., 278:95
Jørgensen, P. S., 278:95
Jurvelin, J., 283:302

K

Kabo, J. M., 274:60; 283:292; 284:299
Kabo, M., 282:114
Kadhi, S. K. M., 280:251
Kadowaki, T., 277:121
Kahanovitz, N., 284:75
Kai, K., 279:292
Kakulas, B. A., 276:169
Kalenak, A., 281:195; 283:145
Kambic, H. E., 275:248
Kamiya, T., 284:234
Kamogawa, M., 277:54
Kanaya, F., 283:296
Kane, H. A., 277:251
Kaneda, K., 282:186
Kang, J. D., 274:47
Kaplan, F. S., 278:217; 280:277; 283:178; 285:250
Karlsson, J., 276:253
Karpman, R. R., 278:116
Katonis, P. G., 275:232
Katsoudas, G., 283:149
Katz, R. L., 281:145
Kauer, J. M. G., 275:37
Kawanabe, K., 278:226
Kazanzides, P., 285:57
Keating, E. M., 276:277
Keim, H. A., 278:51
Kekomäki, M., 283:237
Kelebay, L. C., 276:4
Kelley, S. S., 285:140
Kenan, S., 280:256
Kendra, J. C., 280:125
Kennedy, J., 285:191
Kennedy, R., 285:191
Kerr, J. M., 281:275
Kester, M. A., 279:214
Khare, A. G., 278:286
Khasawneh, Z., 279:138
Kim, Y.-H., 277:182
King, T., 283:261
Kinnard, P., 278:14
Kinnebrew, T. E., 280:125
Kitaoka, H. B., 278:183
Kitaoka, M., 279:292
Kitchel, S. H., 284:63
Kitsugi, T., 278:226

Kiviranta, I., **283:**302
Kjærsgaard-Andersen, P., **279:**157
Klapper, R. C., **285:**147
Kleeman, B. C., **284:**260
Klein, M. J., **280:**256
Klein, R. W., **276:**126
Knapp, D. R., Jr., **274:**312
Knudsen, J. B., **278:**95
Knych, S. A., **276:**307
Kobetic, R., **284:**181
Koh, Y.-G., **277:**182
Kokubo, T., **277:**54; **278:**226
Komazawa, T., **277:**89
Komiya, S., **284:**273
Konsens, R. M., **283:**261
Korinek, S., **280:**186
Korovessis, P., **275:**258; **283:**149
Korovessis, P. G., **283:**130
Kossovsky, N., **276:**7
Kotani, S., **278:**226
Kotoura, Y., **275:**300; **278:**29
Kottmeier, S. A., **281:**195
Krackow, K. A., **284:**221
Krag, M., **278:**305
Krag, M. H., **279:**60
Krause, W. R., **276:**4
Krengel, W. F., III, **283:**285
Kristiansen, T., **278:**305
Krug, W. H., **276:**4
Kuijer, R., **277:**289
Kumar, V. P., **275:**161
Kummer, F. J., **278:**265; **279:**299; **280:**11
Kuntz, D., **279:**281
Kuo, J. S., **285:**250
Kupcha, R., **275:**287
Kuroki, Y., **277:**22
Kuschner, S. H., **276:**192
Kushitani, S., **282:**95
Kwan, M. K., **275:**263
Kwong, L. M., **274:**60
Kyriakos, M., **279:**269

L

Labropoulos, P. A., **282:**177
Lafontaine, M. A., **281:**140
Lagos, F. M., **283:**4
Laird, L., **283:**309
Lambe, D. W., Jr., **280:**289
Lane, J. M., **275:**226; **277:**297
Lang, P., **274:**135
Lange, B. J., **283:**276
Lange, N., **276:**176
Lansinger, O., **276:**253
Laor, A., **281:**189
Larsson, S., **275:**237
Latham, P. D., **276:**210
Lavoie, G., **284:**267
Layer, S., **280:**241
Leach, J., **284:**24
Leach, R. E., **282:**208
Ledbetter, B. R., **280:**15
Ledyaev, V. I., **280:**7
Lee, C. K., **285:**273
Lee, D. H., **281:**229
Lee, D. Y., **285:**273
Lee, E. H., **279:**223
Lee, J., **281:**48
Lehman, W. B., **280:**94; **281:**163; **283:**223
Lemos, M. J., **282:**158
Leon, C., **283:**11
Letts, M., **279:**127
Leu, J.-Z., **276:**299
Levine, A., **278:**37
Levson, M., **280:**241
Lew, M. M., **276:**237
Lewis, M. M., **280:**256
Lewonowski, K., **281:**84
Li, F., **280:**15
Lian, G. J., **280:**160
Lichtman, D. M., **275:**90
Lieberman, J. R., **276:**157
Lindén, B., **284:**156
Linder, L., **276:**147
Lindsey, R. W., **283:**258
Lindstrand, A., **277:**210
Ling, R. S. M., **285:**73
Linscheid, R. L., **275:**46
Lintner, D. M., **283:**145
Lionberger, D. R., **285:**48
Lirette, R., **278:**14
Liss, R. G., **281:**208
Littooy, F., **281:**239
Liu, T.-K., **281:**305
Livermore, J. T., **285:**217
Lockett, L. J., **281:**224
Logan, T. C., **284:**203
Lohmander, S., **277:**210
Londy, F., **281:**199
Lopez-Alonso, A., **275:**280
López-Barea, F., **274:**270
Lopez-Oliva, F., **283:**11
Lorich, D. G., **275:**287
Lokiec, F., **283:**205
Lucas, P. R., **276:**176
Luckey, D., **281:**97
Lusskin, R., **278:**9
Lustig, K. A., **277:**139
Lynch, C. J., **278:**171
Lynch, F., **282:**164
Lyons, V. O., **278:**260
Lysholm, J., **281:**152
Lyttle, C. R., **280:**277

M

MacEwen, G. D., **278:**17; **281:**34
Mack, G. R., **279:**176
Mack, R. P., **281:**168
Mader, J. T., **278:**244
Madsen, N., **279:**214
Maeda, M., **274:**300
Magee, F. P., **284:**283
Mahboubi, S., **274:**311
Majeed, S. A., **282:**222
Majima, T., **282:**186
Majola, A., **285:**263
Mäkelä, E. A., **283:**237
Malawer, M. M., **281:**229
Malcolm, A. J., **274:**60
Malinin, T. I., **285:**40
Malkawi, H., **279:**138
Malkin, C., **281:**97
Mallon, W. J., **277:**142
Maloney, W. J., **278:**147; **280:**230; **281:**112; **285:**158
Manderson, E. L., **276:**262
Mangine, R. E., **277:**217
Mann, F. A., **281:**216
Mann, J. W., **282:**233
Manninen, M., **285:**263
Manske, P. R., **274:**231
Marco, F., **283:**11
Maric, Z., **278:**116
Marin, D., **283:**106
Marinow, H., **280:**104, 136
Markisz, J., **280:**223
Marsh, H. O., **282:**110
Marsh, J. L., **278:**200
Marsolais, E. B., **284:**181
Martin, D. J., **277:**262
Martin, M. M. S., **283:**63
Martin, S. N., **278:**207
Martinez, S., **277:**142
Massie, J. B., **284:**99
Massin, P., **284:**311
Matsubara, T., **276:**299
Matsui, M., **277:**61, 79, 121
Matsumoto, K., **279:**144; **280:**235
Matthews, J., **276:**210
Matthews, L. S., **276:**50; **280:**261; **281:**199; **283:**244
Mayberry-Carson, K. J., **280:**289
Mayor, M. B., **274:**97; **285:**129
Mazzara, J. T., **280:**170
McBroom, R. J., **282:**219
McCarthy, D. S., **274:**238
McCrae, C., **276:**126
McDonald, D. J., **277:**262; **279:**264
McDonald, P., **279:**127
McGee, H., **281:**145
McGovern, T. F., **285:**13

McLoughlin, S. J., **283:**215
McNamara, J. L., **285:**129
McPherson, D., **284:**99
McQueen, D. A., **275:**174
McQueen, M. M., **285:**200
Meadows, S., **282:**170
Meals, R. A., **283:**292; **284:**299
Meffert, R., **278:**200
Melone, C. P., Jr., **275:**65
Menelaus, M. B., **281:**29
Merenda, G., **277:**262
Merritt, K., **280:**281
Meunier, A., **282:**53
Mian, S. W., **276:**206
Michalopoulos, B., **275:**258
Micheli, L. J., **285:**191
Michie, M., **285:**200
Mikić, Z., **275:**19, 29
Milgrom, C., **281:**189
Millea, T. P., **281:**208
Miller, D. V., **281:**115
Miller, G. A., **281:**216
Miller, J., **276:**4
Miller, J. E., **274:**79
Millis, M. B., **274:**154, 160
Milner, R. S., **277:**251
Minamitani, K., **284:**273
Mineo, R., **274:**35; **277:**188
Mino, G. L., **283:**86
Mintz, L., **276:**126
Miskovsky, C., **284:**215
Missinne, L. H., **281:**34
Mitsunaga, M. M., **281:**224
Mittlestadt, B., **285:**57
Mitty, H., **284:**176
Miyamoto, N., **284:**234
Miyamoto, S., **278:**274
Mizuta, H., **279:**292
Mjöberg, B., **285:**280
Modic, M. T., **279:**68
Mollan, R. A. B., **275:**306
Monaghan, B. A., **280:**277
Monteil, H., **282:**241
Montgomery, R. D., **279:**214
Moore, R. N., **278:**253
Moran, M., **280:**223
More, R. C., **282:**114
Moreau, M., **284:**267
Moreland, J., **277:**166
Moreland, J. R., **282:**114
Morimatsu, M., **284:**273
Morimoto, K., **283:**281
Morin, F., **278:**14
Morita, S., **282:**213
Morrey, B. F., **280:**186; **281:**89
Morris, B. A., **276:**225
Morscher, E. W., **274:**172
Mortimer, E. S., **274:**79
Morton, J., **284:**164
Moser, T., **282:**73
Mow, V. C., **285:**181
Mubarak, S. J., **284:**24
Muhr, G., **278:**73
Mullen, J. O., **280:**214
Mullen, N. L., **280:**214
Müller, M. E., **274:**12, 113
Mulroy, R. D., Jr., **280:**230
Munuera, L., **279:**163; **283:**106
Munuera-Martínez, L., **283:**116
Murata, N., **282:**95
Murphy, S. B., **274:**154
Murray, D. G., **285:**217
Murray, D. W., **281:**295
Murray, W. R., **274:**135
Musits, B., **285:**57
Myllylä, V., **284:**136
Mylod, A. G., Jr., **282:**145

N

Nachemson, A. L., **279:**2, 8, 21
Nakahara, H., **276:**291
Nakamura, T., **277:**54; **278:**226
Nakano, K., **274:**300
Nakano, T., **274:**300
Namnyak, S. S., **281:**123
Nathan, R., **275:**65
Navarro-Quilis, A., **283:**90
Neal, W. C., **277:**161
Neer, C. S., II, **280:**182
Nelson, C. L., **284:**303
Nelson, I. W., **276:**210
Nelson, J. P., **282:**154
Nepola, J. V., **278:**200
Neri, A., **282:**229
Newton, G., **278:**138
Nickerson, D. A., **274:**294
Niemann, J. M., **278:**134
Nilsson, O. S., **281:**101; **284:**288
Nimni, M. E., **282:**250
Ninomiya, S., **277:**54
Nishimura, Y., **277:**31
Nishina, T., **277:**121
Nishioka, J., **279:**144; **280:**235
Nishiyama, K., **275:**199
Nizard, R. S., **282:**53
Nogami, H., **275:**144
Nolan, W. B., III, **275:**85
Noordeen, M. H. H., **280:**175
Nordqvist, A., **283:**139
Noyes, F. R., **274:**248; **277:**217; **284:**193
Nuber, G. W., **278:**58
Nystrom, M., **277:**197

O

Obad, S., **280:**263
Obata, K., **282:**213
O'Brien, T. J., **279:**176
O'Brien, W. R., **277:**201
O'Connor, D., **285:**13
O'Connor, D. O., **274:**60
O'Connor, J., **276:**245
Odenbring, S., **277:**210
Odensten, M., **281:**152
O'Donnell, S., **281:**168
O'Driscoll, S. W., **280:**186
Oedekoven, G., **282:**233
Ogden, J. A., **281:**11
Ogilvie, D. J., **274:**305
Oh, J.-H., **277:**182
Ohzono, K., **277:**61, 73, 79, 98, 121; **283:**171
Oishi, Y., **284:**234
Oka, M., **275:**300
Okada, T., **278:**274
Okereke, E., **285:**255
Oki, T., **275:**144
Okumura, S., **282:**213
Olive, R. J., Jr., **282:**110
Ollivierre, C. O., **276:**262
Olmarker, K., **279:**35
Olsen, B., **283:**116
Olsson, E., **277:**155
O'Meara, P. M., **277:**201
On, A., **280:**263
O'Neill, D. F., **278:**153
O'Neill, O. R., **281:**89
Ono, C. M., **281:**224
Ono, K., **275:**133; **277:**2, 61, 73, 79, 89, 98, 121; **278:**274; **283:**171
Ono, Y., **275:**144
Oonishi, H., **282:**95
Orbay, G. L., **279:**299
Orbay, J. L., **278:**265
Ordonez-Parra, J. M., **283:**106
Ortner, F., **274:**226
Osterman, H., **281:**239
O'Sullivan, G. S., **277:**175
Oteo, A., **283:**81
Otero, F., **283:**81
Otsuka, T., **279:**149

P

Papaioannou, T., **285:**210
Paiement, G. D., **280:**300
Päivänsalo, M., **284:**136
Päivärinta, U., **285:**263
Paletta, G. A., **280:**179
Paley, D., **280:**48, 65, 81

Palmer, A. K., **275:**79
Papenfus, K., **281:**133
Parisien, J. S., **275:**243
Parker, J., **285:**223
Parr, J., **280:**300
Parsley, B. S., **275:**204
Partio, E., **285:**263
Pascual, A., **280:**281
Passloff, E. S., **278:**217
Paul, H. A., **285:**57
Pavlik, A., **281:**4
Pazzaglia, U. E., **276:**283
Pearl, M. L., **284:**116
Pearson, R. L., **281:**216
Pearson, W. G., **280:**261
Pedersen, C. M., **274:**282
Pellicci, P. M., **274:**35; **277:**188
Pellise, F., **283:**90
Perez, A. J., **283:**11
Pérez, P. J., **283:**57
Perkins, G., **274:**3
Perry, C. R., **281:**216
Perry, J., **284:**116
Pertschuk, M. J., **278:**217
Peters, P., **278:**286
Peters, P. C., **285:**40
Peters, V., **278:**69
Peterson, D. A., **281:**115
Peterson, P. K., **280:**281
Petersson, C., **283:**139
Pfeffer, G. B., **279:**229
Pflum, F. A., **276:**206
Phemister, D. B., **277:**4
Pho, R. W. H., **279:**223
Picci, P., **278:**37
Pinkes, J., **282:**304
Pinzur, M. S., **281:**239
Pollack, S. R., **285:**255
Pope, M. H., **278:**305; **279:**49, 60; **282:**196
Poss, R., **274:**2, 194
Potter, H., **280:**223
Pous, J. G., **281:**56
Prevot, J., **280:**81
Priem, L., **283:**261
Priestly, L. M., **274:**305
Prietto, C. A., **279:**237
Pritchett, J. W., **275:**274; **279:**310
Pritsch, M., **283:**205
Probe, R., **283:**258
Pruitt, A., **281:**212
Pruitt, D. L., **274:**231

Q

Quesada, P. M., **284:**239

R

Rajacich, N., **280:**72
Ramirez, V., **277:**266; **278:**286
Ramos, L., **283:**74
Rang, M., **283:**290
Raschke, M. J., **282:**233
Raso, V. J., **284:**267
Rauschning, W., **284:**34
Rawlins, B. A., **275:**140
Reddy, N. K., **281:**239
Reeve, J., **278:**88
Reeve, R., **283:**258
Reeves, T. Q. St. L., **284:**161
Reilly, T. M., **275:**287
Reuben, J. D., **285:**48
Revel, M., **279:**303
Richards, R. R., **282:**219
Ries, M. D., **278:**121; **282:**164
Rijke, A., **285:**30
Rimnac, C., **276:**66
Rimnac, C. M., **276:**126
Ripamonti, U., **282:**293
Riquelme, A. G., **283:**86
Ritter, M. A., **279:**157
Robbins, D. S., **280:**247
Roberts, J. M., **276:**176
Robertson, W. W., Jr., **283:**276
Robey, P. G., **281:**275
Rodriguez, A. J., **283:**86
Rodríguez-Peralto, J. L., **274:**270
Rokkanen, P., **283:**237; **285:**263
Romero, M. Z., **283:**4
Ronquist, R. A., **278:**207
Rooney, R. J., **280:**251
Rorabeck, C. H., **281:**145
Rose, B. A., **276:**194
Rosén, I., **279:**82
Ross, J. S., **279:**68
Ross, S. M., **274:**294
Rothman, R. H., **276:**229; **278:**128; **282:**158; **284:**3
Roudier, B., **279:**303
Roudier, R., **279:**303
Rowland, S. A., **277:**238
Rubash, H. E., **274:**47; **280:**300
Rubin, L., **278:**69
Ruiz-Yagüe, M., **283:**116
Ruland, L. J., III, **285:**30
Rushton, N., **281:**295
Rushworth, G., **285:**210
Russell, G., **284:**267
Rychak, J. S., **284:**153
Ryd, L., **276:**56
Rydell, N., **281:**101; **282:**105
Rydevik, B., **279:**35
Rydevik, B. L., **284:**34

S

Säämänen, A.-M., **283:**302
Sacristán, C. G., **283:**21
Saddemi, S. R., **276:**187
Sagara, K., **277:**31
Saha, S., **276:**277
Saito, M., **277:**61, 73, 79, 121; **283:**171
Saito, S., **277:**61, 79, 98, 121; **283:**171
Sakales, S. R., **274:**213
Sakamaki, T., **275:**199
Salonikides, P., **283:**149
Saltzman, C. L., **281:**199
Salvati, E. A., **274:**35; **276:**2, 66, 75, 157; **277:**188; **285:**2
Samimi, S., **277:**197
Sanchez-Barba, A., **283:**11
Sanchez-Barbero, J. C., **283:**39
Sanders, W. E., **280:**198
Sanmartin, R. M., **283:**86
Sasaguri, Y., **284:**273
Sasai, K., **275:**300
Satku, K., **275:**161
Satterlee, C. C., **280:**182
Savini, R., **278:**37
Savolaine, E. R., **275:**194; **279:**133
Savory, C. G., **282:**132
Sawamura, S., **280:**30
Sawangnatra, S., **278:**46
Scales, J. T., **284:**208
Schaal, S., **278:**73
Schaefer, R. A., **281:**212
Schajowicz, F., **279:**264
Scheller, G., **282:**73
Schepsis, A. A., **282:**208
Schickendantz, M. S., **275:**248
Schindler, A., **283:**205
Schmalzried, T. P., **274:**60; **275:**253; **277:**161; **280:**200
Schneider, R., **280:**223
Schoenecker, P. L., **279:**269
Schumacher, H. R., **285:**250
Schurman, D. J., **278:**147; **285:**158
Schwartsman, R., **278:**207; **280:**37
Schwartsman, V., **278:**207; **280:**37
Schwartz, Z., **277:**266; **278:**286
Scuderi, G. R., **276:**26
Sculco, T. P., **274:**35; **277:**188
Sdougos, G., **283:**149
Sebastianelli, W. J., **283:**145
Sedel, L., **282:**2, 53

Sedlacek, R. C., **274**:60
Segal, L. S., **278**:171; **281**:208
Seidman, G. D., **279**:254
Seligson, D., **278**:260
Seral, F., **283**:49
Severt, R., **277**:166
Sferra, J. J., **275**:248
Shaffer, B., **275**:243
Shah, A., **280**:251
Shapiro, E., **282**:196
Share, J. C., **274**:160
Sharkey, P. F., **278**:128
Sharrock, N. E., **274**:35; **277**:188
Shaw, E. D., **278**:101
Shellhart, W. C., **278**:253
Sherman, C., **280**:223
Shih, C.-H., **278**:235; **285**:281
Shikata, J., **275**:133; **278**:29
Shimizu, K., **275**:133; **278**:29
Shives, T. C., **278**:108
Shlamkovitch, N., **281**:189
Sicilia, M., **285**:205
Silvaggio, V., **274**:47
Sim, F. H., **276**:91
Simmons, E., Jr., **274**:265
Siney, P. D., **276**:222; **285**:45
Sivamurugan, S., **276**:210
Skie, M. C., **276**:187
Skinner, H., **284**:239
Skrade, D. A., **285**:244
Slap, G. B., **278**:217
Sledge, C. B., **275**:180
Smith, B. E., **276**:237
Smith, G., **284**:176
Smith, L., **282**:4
Smith, L. M., **274**:275
Smith, M. D., **283**:244
Smith, R., **274**:305
Smith, R. B., **283**:215
Sneath, R. S., **284**:208
Södergård, J., **283**:237
Somer, L., **275**:29
Somer, T., **275**:29
Sommerlath, K., **281**:152; **283**:207
Soslowsky, L. J., **285**:181
Soudry, M., **282**:53
Søballe, K., **274**:282
Spadaro, J. A., **282**:304
Spastris, P., **283**:149
Speer, K. P., **284**:228
Spengler, D. M., **279**:21
Staheli, L. T., **283**:285
Star, M. J., **278**:111
Stauffer, E. S., **278**:171; **281**:208
Stauffer, R. N., **285**:91
Steg, N. L., **277**:251
Steinbeck, T. V., **278**:177
Steinmann, J. C., **284**:80
Stern, L. L.-D., **283**:2, 11, 39, 81
Stewart, H. D., **278**:138
Stiehl, J. B., **285**:244
Stitgen, S. H., **278**:134; **279**:133
Stoller, D. W., **282**:177
Strecker, W. B., **274**:231
Stringer, E. A., **281**:133, 168
Stringer, T. L., **281**:133
Strongwater, A. M., **281**:163; **283**:223
Strømsøe, K., **277**:243
Stryker, W. S., **279**:246
Stuart, M. J., **281**:193
Stulberg, S. D., **276**:126
Styer, D., **274**:248
Sugano, N., **277**:61, 73, 121
Sugimoto, M., **275**:300
Sugioka, Y., **277**:111
Sugiyama, H., **275**:187
Sumner, D. R., **274**:97, 202; **276**:83
Sundaram, M., **277**:262
Surprenant, H. P., **285**:129
Surprenant, V. A., **285**:129
Sutherland, G., **279**:127
Suthers, K. E., **284**:311
Sutton, D., **282**:158
Sutton, W. R., **278**:81
Suzuki, S., **278**:274
Swain, L. D., **277**:266; **278**:286
Swanson, A. B., **281**:107
Swanson, G. de G., **281**:107
Swanson, K. R., **276**:267
Swartz, D. E., **284**:109
Sykes, B., **274**:305

T

Tabata, S., **275**:165; **284**:128
Tadros, F., **279**:138
Tahon, M. M., **282**:241
Tajima, T., **283**:296
Takagi, K., **279**:292
Takahashi, S., **275**:300
Takai, H., **282**:208
Takaoka, K., **277**:61, 73, 79, 121; **278**:274; **283**:171
Takatori, Y., **277**:54
Takeuchi, T., **284**:260
Taleisnik, J., **275**:110
Tammi, M., **283**:302
Tanaka, S., **281**:89
Tandogan, R. N., **282**:241
Tapper, E. M., **276**:267
Tateishi, H., **274**:300
Taylor, R. H., **285**:57
Teates, C. D., **285**:30
Tedder, J. L., **281**:159
Teeny, S. M., **284**:221
Tennant, T., **276**:19
Terrono, A. L., **275**:124
Terry, G. C., **279**:214
Terwindt-Rouwenhorst, E., **277**:289
Teshima, R., **279**:149
Tetsworth, K., **280**:48, 65
Thal, R., **279**:190
Thelander, U., **275**:237
Thomas, K. A., **283**:163
Tober-Meyer, B., **280**:289
Tohjima, T., **277**:89
Torburn, L., **284**:116
Törmälä, P., **283**:237
Train, J., **284**:176
Tredwell, S. J., **281**:63
Triantafyllou, S. J., **283**:196; **284**:153
Truchly, G., **276**:206
Trholm, C., **278**:95
Tsai, C.-L., **281**:305
Tsao, A. K., **276**:126
Tsenter, M., **283**:292; **284**:299
Tsuchida, T., **282**:186
Tsukayama, D. T., **280**:281
Tsutsui, H., **277**:111
Tucker, H. L., **280**:125
Tullos, H. S., **278**:62; **283**:156
Turcotte, R., **279**:311
Turen, C. H., **279**:258
Turner, T. M., **276**:83

U

Udén, A., **279**:82
Ugai, K., **283**:281
Uhl, R. L., **278**:9
Uhthoff, H. K., **281**:2, 48
Unger, P. A., **284**:310
Unruh, H., **279**:127
Urban, R. M., **276**:83
Urist, M. R., **277**:229
Usabiaga, J., **283**:74
Usuku, G., **279**:292
Utter, R. G., **285**:217

V

Vailas, J. C., **282**:177
Vainio, J., **283**:237
van der Linden, A. J., **277**:289
van Rietbergen, B., **274**:124
Varela, H., **275**:280
Varlet, A., **282**:241
Vasenius, J., **285**:263
Vassilakos, P., **275**:258
Velkes, S., **283**:205

Ventura, E., **282:**229
Verhelpen, M., **282:**273
Viladot, A., **283:**34
Villar, J. M., **283:**49
Vivar, F. G., **283:**49
Vogler, J. B., III, **277:**142
Voloshin, A., **281:**189
von Schroeder, H. P., **275:**263; **276:**194, 202

W

Waddell, J. P., **284:**164
Walker, P. S., **284:**208
Walker, R. H., **278:**111
Wall, D. M., **280:**104, 136
Wallensten, R., **277:**155
Walls, J. P., **284:**170
Walsh, S., **277:**277
Walter, I. A., **282:**31
Wand, J. S., **278:**88
Wang, G.-J., **285:**30
Wang, J.-W., **278:**235
Warner, J. J. P., **280:**179; **285:**191
Warren, R. F., **280:**179; **284:**228
Warren, S. B., **285:**236
Washburn, S. D., **279:**237
Watkins, R., **284:**47
Watson, J. T., **275:**248
Watson, R. C., **276:**267
Weaver, T., **284:**189
Weinans, H., **274:**124
Weinstein, J. N., **284:**34
Weinstein, S. L., **281:**69
Weltmer, J., **280:**160
Wenger, D. R., **284:**24
Werner, F. W., **285:**217
Westfelt, J. N., **283:**270
White, A. A., III, **284:**109
White, R., **276:**222
White, S. E., **284:**215
Whitecloud, T. S., III, **283:**163
Whitelaw, G. P., **279:**254
Whiteside, L. A., **274:**97; 238; **275:**187, 211; **284:**215
Wickiewicz, T. L., **284:**228
Wicklund, B. H., **280:**281
Wiedel, J. D., **278:**121
Wiesel, S. W., **284:**14
Wiley, A. M., **280:**311
Wiley, J. J., **281:**2
Wilkinson, J. A., **281:**75
Willén, H., **277:**210
Willén, J. A. G., **276:**169
Willert, H.-G., **282:**86
Willett, C., **280:**230
Williams, G. R., **280:**310
Williams, J. L., **283:**178
Williams, R. P., **275:**174
Williams, S., **274:**294
Williams, S. A., **280:**30
Williamson, B., **285:**57
Williamson, M. B., **277:**251
Wills, C. A., **279:**237
Wilson, S. C., **284:**153
Winter, M., **282:**73
Wiss, D. A., **283:**231; **285:**229
Wittenberg, R. H., **278:**73
Witvoet, J., **282:**53
Wixson, R. L., **285:**84
Wolf, L. R., **276:**229
Wolfe, H. J., **276:**307
Woll, T. S., **281:**204
Woo, S. L.-Y., **275:**263
Wood, V. E., **285:**205
Woodbury, R. A., **275:**287
Wordsworth, B. P., **274:**305
Wortley, M. D., **283:**124
Wosk, J., **281:**189
Wright, J. G., **283:**290
Wright, T., **276:**66, 75
Wright, T. M., **276:**126
Wroble, R. R., **279:**180
Wroblewski, B. M., **276:**115, 222; **285:**45

Y

Yamaga, H., **284:**234
Yamamoto, H., **282:**213
Yamamoto, K., **279:**149
Yamamuro, T., **275:**133, 300; **278:**29, 226
Yasik, E., **281:**140
Yasuda, K., **282:**186
Yoh, K., **274:**300
Yoo, M. C., **277:**128
Yoshii, I., **275:**211
Yoshikawa, H., **278:**274
Yoshioka, H., **279:**292
Yosipovitch, Z., **282:**229
Young, M. F., **281:**275

Z

Zajac, F. E., **284:**247
Zarzoso, R., **283:**39
Zatti, G., **276:**283
Zeh, J., **279:**21
Zeiss, J., **275:**194; **276:**187
Zichner, L. P., **282:**86
Zielke, K., **283:**130
Zinar, D. M., **279:**246; **282:**123
Zinberg, E. M., **276:**194
Zohman, G. L., **284:**299
Zuckerman, J. D., **274:**213
Zuhars, J., **285:**57